

FROM THE  
CREATOR OF

**RollerCoaster**  
TYCOON

CHRIS SAWYER'S

# LOCOMOTION™



ATARI



# INTRODUCTION

One of the most common questions people ask me is, “How many are there in your development team?” Most expect an answer of at least five, maybe 10, even 15 people or more — like most, if not all, other games development teams. They are usually stunned to learn that I create my games with only the help of a freelance graphic artist and a musician. I do all the design, programming, project management and research myself. Does this mean my games can’t be as good as those developed by large teams? Not at all. In fact, I think many game designs suffer from having too many people working on them, losing their individual character and becoming games that look and play like so many others. Of course, the amount of work involved in creating a modern game is immense, and when you don’t have a large team it can take a long time.

*Chris Sawyer’s Locomotion™* started life in 1999 after I completed *RollerCoaster Tycoon®*, but has much earlier roots. In the early 1990s, I created the game *Transport Tycoon*, which was a tremendous success. In 1996, I wanted to start from scratch on a sequel to *Transport Tycoon*, and put a lot of work into it, but then something came along and distracted me — roller coasters! So, the whole project was gradually re-shaped into what we now know as *RollerCoaster Tycoon*, one of the best-selling PC games of all time. In 1999, I resumed work on the *Transport Tycoon* sequel, but once again I postponed the project while creating *RollerCoaster Tycoon 2*. In fact, *RollerCoaster Tycoon 2* was created using large parts of the programming intended for this game. Once *RollerCoaster Tycoon 2* was complete, the sequel got my full attention again, and after two more years of work, the game is at last completed.

In some ways, *Chris Sawyer’s Locomotion* is a very simple game. The concept is very basic: just transport cargo and passengers from a location that produces them to a location that wants them. But the game is vast in scale and depth, where you can play the game in your own particular style and get drawn into the world you are building in, getting personally attached to your handiwork. It isn’t the perfect game, but then I don’t see that as being the aim of my job — a perfect game would have no flaws, no character, no individuality. I try to create games that are unique and different in style, games from which the player can achieve satisfaction through construction rather than destruction, games with ongoing gameplay rather than a limited script or only a single definition of success. People are still playing *Transport Tycoon* 10 years after it was published — I hope that 10 years from now people are still playing *Chris Sawyer’s Locomotion*!

Chris Sawyer

## PROBLEMS WITH YOUR SOFTWARE ?

The methods listed below solve most of the problems when running latest DirectX games.

### Checking my system specification

Please take time to **ensure your system meets the configuration requirements**, detailed on the packaging.

The **DirectX Diagnostic Tool** can provide you with information about your system specification if you are unsure of your PC's current specifications. To run the DirectX Diagnostic Tool, click onto the **Start** button and select **RUN**. In the open box type **DXDIAG**. The DirectX Diagnostic Tool appears, giving you access to all details about your system or video and sound cards. It is possible to control if video display and sound are running properly, by clicking on the relevant buttons proposing you to test **DirectDraw**, **Direct3D** and **DirectSound**.

**Note:** unless you are an advanced user we do not recommend changing any of the **options** in the DirectX Diagnostic Tool.

### Before starting your game

In some cases, programs that are running on your system can monopolise resources that the game needs in order to run properly. Not all of these programs are immediately visible, and many activate automatically on start up. There are a number of programs known as "**background tasks**", that are always running on your system. In some cases, these may cause the game to crash or lockup. As such, we recommend that you deactivate these "background tasks" prior to playing.

- If your system is running **Anti-Virus** or **Crash Guard** programs, we suggest you, if you are not advised to do so, to close or disable them before running the game. To do this, find the icon for the program on the Windows taskbar. Right-click the icon and select CLOSE, DISABLE or the relevant option.
- Once Anti-Virus and Crash Guard programs have been disabled, you should end general background tasks as these can sometimes cause problems when installing or running PC games. Consult "How to end all unnecessary general background tasks" section.

### Cleaning up the system.

Before you install any software, it is critical that your hard disk be in optimum working order. We recommend that you get into the habit of performing regular "**house keeping**" on your PC. ScanDisk, Disk Defragmenter and Disk Cleanup are the tools that you need to use to keep everything running smoothly. Such good practise offers you the best chance of running today's game with minimum issues. As an added benefit, a clean system will operate more efficiently, and other software applications you use may run more quickly and stably. Consult the Windows Help Guides for information on running the **ScanDisk/Error-checking**, **Disk Defragmenter** and **Disk Cleanup** tools.

#### Using Windows help

- 1 Click onto the Start button and select Help (or Help and Support for Windows XP users) to bring up the Windows Help Guides.
- 2 Now, click the Search section and in keywords such as "ScanDisk" (Win 98/ME), "Error-checking" (Win 2000/XP), "Defrag" and "Disk Cleanup" to find the guides that help you to run these tools.

### Game crashing or locking up?

When running games that use the latest version of DirectX, you must ensure your computer is running the very latest **driver** for your video card. Doing so can help solve crashes and lock-ups in games.

• **First of all**, try downloading the latest driver from the video card manufacturers website. Listed below are the most popular **video card manufacturers**:

Asus: <http://www.asus.com>  
 ATI: <http://www.ati.com>  
 Creative Labs: <http://www.europe.creative.com>  
 Guillemot: <http://www.guillemot.com>  
 Hercules: <http://www.hercules.com>

• **If there is no improvement**, try downloading the latest driver provided by the **video card chipset manufacturer**:

NVidia: <http://www.nvidia.com>  
 ATI: <http://www.ati.com>  
 Power VR: <http://www.powervr.com>  
 Matrox: <http://www.matrox.com>  
 S3: <http://www.s3graphics.com>  
 Intel: <http://www.intel.com>  
 SIS: <http://www.sis.com>

Creative Labs: <http://www.europe.creative.com>  
 C-Media: <http://www.cmedia.com.tw>  
 Diamond: <http://www.diamondmm.com>  
 ESS: <http://www.esstech.com>  
 Videologic: <http://www.videologic.com>  
 Yamaha: <http://www.yamaha.com>

• Choppy or stuttering sound, or sound that cuts in and out? Try downloading and then installing the latest **driver for your sound card**:

## How to end all unnecessary general background tasks.

**Important note:** Ensure that you re-enable background tasks after playing by restarting your computer, doing so will **reactivate automatically** all of the background tasks that you ended.

### Windows 98/ME

- 1 Hold the CTRL and ALT keys on your keyboard and press DELETE once. The Close program window appears with a list of all background tasks currently running on your system.
- 2 To end a background task, click on its name in the list, then click the End Task button.  
**Note:** It is important that you **DO NOT CLOSE** the background tasks named **Explorer** and **Systray** as these tasks are necessary for Windows to operate. All other background tasks may be closed.
- 3 The Close Program Window closes and the task is ended. Repeat the above steps to close down any/all other background tasks.

### Windows 2000/XP Professional

- 1 Hold the CTRL and ALT keys on your keyboard and press DELETE once. The Windows Security window appears.
- 2 Click Task Manager to open the Windows Task Manager. To end a background task, click on its name in the list under the Application tab, then click the End Task button.  
**Note:** Depending on your settings, when pressing CTRL, ALT and DELETE some Windows 2000/XP Professional users may bypass the Windows Security window and go straight to the Windows Task Manager.

### Windows XP Home

- 1 Hold the CTRL and ALT keys on your keyboard and press DELETE once. The Windows Task Manager window appears.
- 2 To end a background task, click on its name in the list under the Application tab, then click the End Task button.




## If you finally decide to call the hotline:

**Before making your call**, we ask you to **sit at your computer**, have the following information available (see "Checking my system specification"), and be ready to take notes:

- System Make and Model
- Processor Type
- Operating System, including version number if possible (such as Windows® 98; Windows® Me)
- RAM (Memory)
- Video and sound card data and drivers
- Any screen or error messages you've encountered (and where)

# TABLE OF CONTENTS

<b>INTRODUCTION</b>	<b>3</b>	<b>CHRIS SAWYER'S</b>	
		<b>LOCOMOTION BASICS</b>	<b>25</b>
<b>TROUBLESHOOTING</b>	<b>4</b>	THE OBJECT OF THE GAME	25
		FIRST STEPS	25
<b>WELCOME TO CHRIS SAWYER'S LOCOMOTION</b>	<b>8</b>	<i>Status Window</i>	26
		<i>Company Owner and Status</i>	26
<b>GETTING STARTED</b>	<b>8</b>	SURVEY THE LANDSCAPE	29
THE README FILE	8	<i>Mini-Map</i>	29
INSTRUCTION MANUAL	9	<i>Supply and Demand</i>	31
SETUP AND INSTALLATION	9	INDUSTRY	32
<i>Installation of DirectX</i>	9	<i>The Industry List</i>	32
MAIN MENU	10	<i>The Industry Status Window</i>	33
		MANIPULATING THE	
<b>TAKE CONTROL</b>	<b>11</b>	LANDSCAPE	34
CONTROLLING THE VIEW	14	<i>Clear Area</i>	34
GAME OPTIONS	14	<i>Adjust Land</i>	35
<i>Game Options Window</i>	15	<i>Adjust Water</i>	36
<i>Display Options</i>	15	<i>Plant Trees</i>	37
<i>Sound Options</i>	16	BUILDING ROADS	37
<i>Music Options</i>	16	<i>The Stations Tab</i>	39
<i>Regional Options</i>	17	BUILDING RAILROADS	40
<i>Control Options</i>	18	<i>Build Tracks Window</i>	41
<i>Miscellaneous Options</i>	18	<i>Signal Construction</i>	43
SOUND MENU	18	BUILDING VEHICLES	44
VIEW MENU	19	<i>Vehicle Information</i>	
STATUS DISPLAY	19	<i>Window</i>	45
TIME DISPLAY	20	<i>Vehicle Status Window</i>	50
SINGLE-PLAYER GAME	20	MESSAGES	51
TWO-PLAYER GAME	21	<i>Show Recent Messages</i>	51
<i>Starting A Multiplayer Game</i>	21	<i>Message Options</i>	51
<i>Host A Game</i>	22		
<i>Join A Game</i>	22	<b>RUNNING YOUR</b>	
<i>Start New Game/</i>		<b>TRANSPORTATION EMPIRE</b>	<b>53</b>
<i>Load Game</i>	22	STATIONS	53
<i>Connecting Through</i>		<i>Station List Window</i>	53
<i>A Firewall</i>	23	<i>Building a Station</i>	54
<i>Playing the</i>		<i>Station Catchment Area</i>	55
<i>Two-Player Game</i>	23	<i>Road Stations</i>	55

<i>Rail Stations</i>	56	EFFECTIVE TRACK DESIGN	78
<i>Airports</i>	57	<i>Basic Loop</i>	78
<i>Docks</i>	58	<i>Basic Double Track Line</i>	80
<i>The Station Window</i>	58	<i>Enhanced Double Track Line</i>	81
TOWNS AND CITIES	60	<i>Complex Double</i>	
<i>Towns List</i>	60	<i>Track Layout</i>	82
<i>Town Information Window</i>	60	<i>Junctions in Double</i>	
<i>Local Authority Rating</i>	61	<i>Track Layouts</i>	83
AVAILABILITY AND		INDUSTRIES	85
OBSOLESCENCE	62	<i>Interfering With</i>	
FINANCIAL MATTERS	62	<i>Industry Output</i>	85
<i>Loans</i>	62	<i>Funding New Industries</i>	85
<i>Optimizing Your Finances</i>	63		
<i>The Companies List</i>	64	SCENARIO EDITOR	87
<i>Rival Owner Characteristics</i>	65	SCENARIO MAIN SCREEN	87
MONITORING YOUR		<i>Editor Options Menu</i>	87
PROGRESS	66	<i>Sound Menu</i>	88
<i>Company Value</i>	66	<i>Objects Window</i>	88
<i>Performance Index</i>	66	CREATING A SCENARIO	
		— STEP-BY-STEP	88
ADVANCED STRATEGIES	68	<i>Step 1: Object Selection</i>	88
ADVANCED VEHICLE		<i>Step 2: Landscape</i>	
CONCEPTS	68	<i>Generation</i>	91
<i>Adding To Existing Vehicles</i>	68	<i>Step 3: Scenario Options</i>	94
<i>Refitting a Vehicle</i>	69	<i>Step 4: Save Scenario</i>	95
<i>Vehicle Reliability</i>	69	<i>Step 5: You're Done!</i>	95
<i>Planning Vehicle Routes</i>			
<i>and Stops</i>	70		
BUILDING ON		 SUOMI	96
DIFFICULT TERRAIN	72	 SVENSKA	98
<i>Slopes</i>	72		
<i>Bridges</i>	73	 PORTUGUESE	100
<i>Tunnels</i>	74		
STATION MANAGEMENT	75		
WORKING ON		CREDITS	102
THE RAILROAD	76	TECHNICAL SUPPORT	106
<i>Locomotive Power</i>	76	KEYBOARD SHORTCUTS	107
<i>Building Junctions</i>	77		
<i>Signals</i>	78		



# WELCOME TO CHRIS SAWYER'S LOCOMOTION

Everything needs to get somewhere: iron ore to the steel mill, steel to the factory, goods to the city, and passengers and mail across town or across the country. The world needs transport. Your challenge is to build and run the transport networks to keep the world moving — to provide the locomotion!

Of course, you're not in the transport business just to keep the world moving... you're in it for the money. Design and build efficient networks, and you'll be raking it in and extending your routes before you know it. While you're doing this, the world is changing: well-served towns grow, industries close down as new ones start up, and transport technology advances with faster and more efficient vehicles.

But not everything will be smooth sailing -- resources will run dry, vehicles will break down and, worst of all, you probably won't be the only company competing for items to carry.

Your opponents might be ruthless and aggressive, building stations right next door to yours to compete for passengers and cargo, running better services to attract more cargo, and generally getting in your way. But with careful planning and good management you can beat them at their own game and build a dominant transport company worth millions.

## GETTING STARTED

### THE README FILE

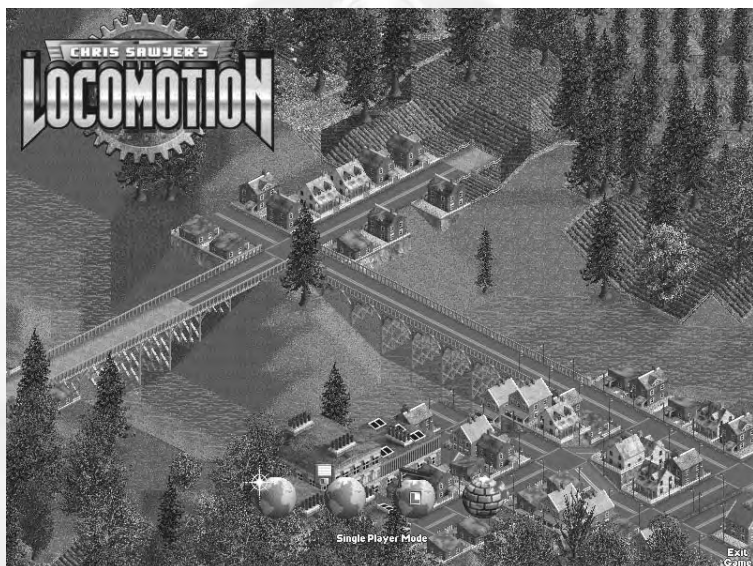
The *Chris Sawyer's Locomotion* CD-ROM game has a ReadMe file that includes the License Agreement and up-to-date information about the game. We strongly encourage you to take the time to read this file in order to benefit from changes made after this manual went to print.

To view the ReadMe file, double-click on the **ReadMe.txt** icon on the *Chris Sawyer's Locomotion* directory found on your hard disk (usually C:\Program Files\Atari\Locomotion). You can also view the ReadMe file by clicking on the **Start** button on your Windows® taskbar, and then select **Programs>Atari>Locomotion**, and click on ReadMe.



## MAIN MENU

The Main Menu opens automatically when you start the game:



- **Start New Game:** Start a new single-player game of *Chris Sawyer's Locomotion*.
- **Load Saved Game:** Load a previously saved game. To load a game, click the Load Saved Game icon and click on the name of the saved game.
- **Show Tutorial:** Click the Show Tutorial icon to display a list of available tutorials. Click the name of a tutorial to view it.
- **Scenario Editor:** Open the game editor, which allows you to create your own *Chris Sawyer's Locomotion* scenarios.
- **Single-Player/Two Player Mode Toggle:** Switch between single-player mode (see page 20) and two-player mode (see page 21).
- **Exit Game:** Close *Chris Sawyer's Locomotion* and return to the Windows desktop.

## TAKE CONTROL

In order to get the best experience while learning to play *Chris Sawyer's Locomotion*, we recommend that you start with the in-game tutorials and read the following overview of the game interface first before you dive into the scenarios.

The game screen contains a number of basic control and display elements, which are described in detail later in this manual. The icons along the top of the screen (1-13) provide access to drop down menus.



**Game Options Menu:** Access general game functions, including saving and loading, and game options (see "Game Options" on page 14).



**Sound Menu:** Adjust sound and music options (see "Sound Menu" on page 18).



**Zoom Menu:** Zoom in and out on the game screen, and access the Mini-Map. You can also spin the mouse wheel to zoom in and out.



**Rotate Menu:** Rotate the game screen clockwise or counterclockwise. Holding down the right mouse button and spinning the mouse wheel also rotates the game view. You can also rotate the landscape clockwise by pressing the Enter key.



**View Menu:** Change game screen view options (see "View Menu" on page 19).



**Landscape Menu:** Change the height of the land, plant trees, and so on (see "Manipulating the Landscape" on page 34).



**Tracks Menu:** Build train and tram tracks (see "Building Railroads" on page 40).



**Roads Menu:** Build roads and bridges (see "Building Roads" on page 37).



**Port Menu:** Build airports and docks (see "Airports" on page 57 and "Docks" on page 58).



**Vehicle Construction Menu:** Buy and upgrade vehicles (see “Building Vehicles” on page 44).



**Vehicle Status Menu:** Access information about your vehicles (see “Vehicle Status” on page 50).



**Stations Menu:** Access information about your stations (see “Stations” on page 53).



**Town/Industry Menu:** Display information about towns and industries (see “Industries” on page 85 and “Towns and Cities” on page 60).



**Status Display:** View financial information and approval ratings for all companies (see “Financial Matters” on page 62).

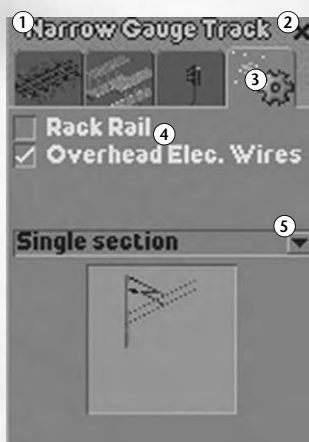


**Time Display:** View the current date, control the game speed, access the Messages window and open the Mini-Map (see “Mini-Map” on page 29).

## Information and Control Windows

All windows in the game share common interface and display elements:

- 1. Title Bar:** Shows the name of the window, station, vehicle, and so on. Click on the title bar of a vehicle or station you own to change its name. You can reposition a window by clicking on its title bar and dragging it.
- 2. Close Button:** Click to close the window. You can also press **Backspace** to close the topmost window. Pressing **Shift + Backspace** closes all open windows.



- 3. **Tabs:** Many windows include multiple panes of information, which you can access by clicking the tabs at the top of the window.
- 4. **Drop-Down Menus:** Some windows include drop-down menus.
- 5. **Checkboxes:** Some windows include options with checkboxes.

**Information Displays:** Many windows include information displays. See the descriptions of specific control windows later in this manual for details.

**Resize Handle:** Most windows are resizable. To resize a window, click and drag the resize handle in the lower-right corner.

## **Sorting Window Information**

Some windows include scrolling lists with multiple columns of information. You can sort the information in these lists by clicking at the top of a column.

For example, the **Industries window** contains the Industry, Status, and Production Transported columns. By default, industries are ordered alphabetically by name (Industry). If you click on the Status column header, the industry list is resorted by the type of cargo produced.

## **Pop-up Help**

Most tabs and buttons have “floating help text” that identifies their function. To see this text, hold the mouse cursor over the tab or button for a few seconds. For example, if you select a bridge type while building a track and hold your mouse button over it, a box pops up showing the type of bridge, maximum height, and maximum speed.

## **Opening Multiple Windows**

You can open up to seven windows at a time. If you attempt to open more, the game automatically closes one of the open windows.

## CONTROLLING THE VIEW

*Chris Sawyer's Locomotion* uses an overhead isometric view. To rotate the view in 90-degree increments, use the **Rotate Menu** (see page 11) or press the **Enter** key. You can zoom in and out of the main view by either pressing the **Page Up** / **Page Down** keys or by using the mouse wheel.

The main view will automatically move when you scroll the mouse to any edge of the screen, if you have this option checked (see "Control Options" on page 18). You can also scroll the main view by using the arrow keys, or by right-clicking and dragging on the landscape.

Most objects in the game will display context-sensitive information that can be activated by the mouse. For example, when you move the mouse pointer over a station, you can see what goods or people are waiting there. Left-clicking on an object generally opens the window associated with that particular object. Right-clicking on a road or track allows you to edit it in that location. Right-clicking an object such as a station or train displays the general status window associated with that type of object.

## GAME OPTIONS



The **Game Options** menu provides access to a number of basic in-game functions:

- **Load Game:** Load a previously saved game.
- **Save Game:** Save your current game. Enter a name in the Save Game dialog and click Save. By default, single-player saved games are saved in the Single Player Saved Games folder in the *Chris Sawyer's Locomotion* directory, and two-player games are saved in the Two Player Saved Games folder, but you can save in any folder you choose. You can also open the Save Game dialog by clicking the **Game Options Menu** icon.

- **About *Chris Sawyer's Locomotion*:** View the game credits.
- **Options:** Open the **Game Options window** (see below).
- **Screenshot:** Save a BMP-format screenshot of the game in progress. You can also save a screenshot at any time by pressing **Ctrl-S**. Screenshots are automatically saved in the *Chris Sawyer's Locomotion* game folder.
- **Quit Game:** Quit the game in progress and return to the **Main Menu**.

## Game Options Window

The **Game Options window** provides access to various basic game play options, including video, sound, music, and game controls and preferences.

### Display Options

- **Display Resolution:** Set the graphic resolution for *Chris Sawyer's Locomotion*. The default resolution is generally one step below your current desktop resolution. (So, if your desktop is set to 1024x768, the game's default display resolution is 800x600.) Higher resolutions may cause performance issues on slower machines.
- **Landscape Smoothing:** When this option is checked, the edges of the landscape tiles on the main view are smoothed. By default, this option is ON.
- **Gridlines on Landscape:** When this option is checked, the landscape grid is visible. By default, this option is OFF, however landscape gridlines appear when you are building tracks and roads.
- **Vehicles min. display scale:** Determines the smallest size at which vehicles appear in the game when you zoom in and out. The default selection is Quarter-scale.
- **Station names min. display scale:** Determines the smallest size at which the text for station names appears. The default selection is Quarter-scale.
- **Construction Marker:** Toggles the colour of the cursor used for constructing roads, tracks, and so on between white (default) and translucent.



## Sound Options

- **Sound Driver:** *Chris Sawyer's Locomotion* automatically selects an appropriate sound driver when the game is installed. To change to a different sound driver, select it from the drop-down menu.
- **Sound Quality:** The game automatically selects the most appropriate sound-quality setting (low, medium, or high) upon installation. You can change this setting here.
- **Forced Software Buffer Mixing:** Some computer/sound card combinations can cause compatibility issues with *Chris Sawyer's Locomotion*. If you experience a crackling in the sound or the game hesitates when sound effects play, toggle this option to its opposite setting to alleviate the problem. If you do not experience sound problems, you do not need to change this option.



## Music Options

- **Currently Playing:** Shows the name of the music track currently playing. To select a different music track, select it from the list.
- **Music Player Controls:** Controls the music playback. From left to right the controls are: Stop (stop music playback); Play (start playback of Currently Playing music track); and Next Track (skip to the next music track on the Currently Playing list).
- **Volume:** Controls the playback volume of the music.




The drop-down menu below the volume slider allows you to select the music tracks you want played in the game. You have three choices:

- **Play only music for current era:** Select this option to play only music associated with the current game year (or time period).
- **Play all music:** Select this option to allow all music tracks to play throughout the game.
- **Play customized selection of music:** Select this option to play only the music tracks selected (checked) on the **Edit Music Selection** menu.



When “Play customized selection of music” is selected, click on “Edit selection...” at the bottom of the window to create your own list of music tracks. The **Edit Music Selection** window will open, listing the names of all music available in the game. Check music tracks to select them. When you finish making your choices, close the window to save your changes.

## Regional Options

- **Distance and Speed:** Toggle the distance and speed measurements between Imperial (miles, miles-per-hour) and Metric (kilometers, kilometers-per-hour).
- 
- **Heights:** Toggle the height marker displayed when the Show Height Marks on Land option is selected on the **View menu**. Options are: Real Values (feet, meters) and Units (a positive or negative number that shows the land height in units relation to sea level: +1, -5, and so on).
  - **Current Currency:** Selects the type of currency (dollars, Euros, yen, and so on) used in the current scenario. Current Currency defaults to the currency defined by the scenario.
  - **Preferred Currency:** Set the default currency. This setting has no effect unless you click one or both of the checkboxes described below.
  - **Use preferred currency when starting a new game:** Select this option to use the currency type displayed in the **Preferred Currency menu** each time you start a new game. When you load a saved game that specifies a type of currency other than the preferred currency, that specified currency is used.
  - **Use preferred currency always:** Select this option to use the currency type displayed in the **Preferred Currency menu** at all times.

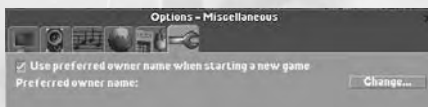
## Control Options

- **Scroll View when Pointer at Screen Edge:** When this option is checked, the view automatically scrolls when you move your mouse pointer to the edge of the screen. (You can also scroll the view by holding down the right mouse button and dragging the mouse in the direction you want to scroll, or by pressing the arrow keys.)
- **Customize Keys:** Set keyboard commands to suit your style of play. To change a keyboard shortcut, click the command on the list and then press the key to which you want to map the control. If you select a key that is already used for an existing shortcut, the newly selected shortcut replaces the old one. Click on Reset Keys to reset the keyboard shortcuts to their default values. Close the **Keyboard Shortcuts window** to save the settings. (See “Keyboard Commands” on page 107 for a list of default keyboard shortcuts.)



## Miscellaneous Options

The miscellaneous options group allows you to set a default owner name. To change the preferred owner name, click on Change. Check the “Use preferred owner name when starting a new game” option to use this name every time you start a new scenario.



## SOUND MENU

- **Mute:** Toggle all game sounds and music ON and OFF. When Mute is selected, the Sound Menu icon has a red X through it. You can also toggle mute mode by clicking the Sound Menu icon.
- **Play Music:** Toggles the music ON and OFF.
- **Music Options:** Opens the Music Options section of the **Game Options window**. (See “Music Options” on page 16 for details.)



## VIEW MENU

- **Underground view:** Renders the ground transparent so you can see tunnels and other underground features.
- **Hide foreground tracks & roads:** Hide roads, railroads, airports and docks in the lower half of the screen.
- **Hide foreground scenery & buildings:** Hide terrain objects (such as trees) and buildings in the lower half of the screen.
- **Height marks on land:** Display the height of every land square not occupied by a road or railroad. These marks are only visible in the closest zoom mode.
- **Height marks on tracks and roads:** Display terrain height marks on all roads and tracks.
- **One-way direction arrows:** Display one-way arrows on roads and tracks.
- **Town names displayed:** Display town names.
- **Station names displayed:** Display station and passenger stop names.



## STATUS DISPLAY

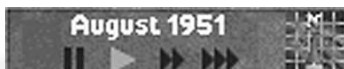
The **Status Display** in the lower-left corner provides access to information about all of the transport companies in the game. This display shows company treasuries (the amount of cash on hand) and Performance Indexes. (See “Performance Index” on Page 66 for more information.)

The face icon on the left side of the display is your owner image. Click this image to open your company’s Status window. (See “**Status Window**” on page 26 for details.)

Move the cursor over the face icon to display the **Owners menu**, which lists all of the companies competing in the current scenario and their current standing in the game from highest-ranked (top) to lowest-ranked (bottom). To open a competitor’s **Status window**, click that company name.

Click the Companies List option to open the **Companies List window**, which contains a number of graphs and displays that compare your company’s progress to those of your competitors. (See “Companies List” on page 64.)

## TIME DISPLAY



- **Pause:** While paused, you can look at status menus and displays, but you cannot manipulate any objects on the landscape. Doing so starts play again at normal speed. To manually resume play, click on Pause again, or click one of the three Play controls. You can also pause the game by pressing the **Pause** key.
- **Play Normal Speed:** Play at normal speed. This is the default time rate.
- **Fast Forward:** Play at three times the normal rate.
- **Extra Fast Forward:** Play at nine times the normal rate.

Click the icon on the right side of the **Time Display** to open the **Mini-Map** (see “Mini-Map” on page 29 for details).

**Note:** The fast-forward play options are not available in two-player games.

The Time Display also shows scrolling ticker-tape messages. Click this display to open the Message window. (See “Message” on page 51.)

## SINGLE-PLAYER GAME

There are over 40 single player scenarios available in *Chris Sawyer's Locomotion*, each one challenging your transport management skills in unique ways.

### TIP

Start with the Beginner scenarios, and move on to greater challenges as you gain familiarity with the game.



### New Game

Click the Start New Game icon on the **Main Menu** to open the **Select Scenario** window.

The scenarios are divided into five levels of difficulty:

- Beginner
- Easy
- Medium
- Challenging
- Expert



Select a tab on the **Select Scenario window** to display a list of scenarios. Move the cursor over a scenario to display a thumbnail image of the game map, a description of the highlighted scenario and the following statistics:

- **Challenge:** The goal or goals you must achieve.
- **Start Date:** The starting year of the scenario.
- **Competing Companies:** The maximum number of competing companies and the time at which each one enters the game.

Click the scenario name to play that scenario.

## TWO-PLAYER GAME

*Chris Sawyer's Locomotion* allows you to engage in fiscal combat with the most unpredictable and potentially cunning rival on the planet: another human player.

In terms of speed and reliability, two-player mode is ideally suited to local area network (LAN) play. The game will play on dial-up connections, but might be prohibitively sluggish.

*Chris Sawyer's Locomotion* supports only the TCP/IP network protocol for LAN and Internet play.

### Starting a Multiplayer Game

To start a two-player game, click the Single Player Mode/Two-Player Mode toggle on the **Main Menu**. This opens the **Two Player Game window**, which has two tabs:



- **Two Player Game:** The left tab has two options: Host and Join.
- **Two Player Game — Options:** The time-out value sets the amount of time the game will wait for expected data from the other computer while playing. The games will disconnect if this time-out value is exceeded. The second option, “Share additional companies/owner faces”, allows you to share owner images that you import from an external faces editor (not yet available) with your opponent. Select this option to automatically copy your custom companies and faces to your opponent’s machine when you connect over the LAN or Internet.

## **Host A Game**

To host a game, click “Set this computer up as host” on the **Two Player Game window**. The game will wait for another player to join. Click Cancel to exit Host mode before another machine connects.

## **Join a Game**

To join a game hosted by another player, click “Connect to host” on the **Two Player Game window**. This opens the **Enter Host Address** dialogue.

The next step varies for Internet and LAN play:

- **Internet Games:** To join an Internet game, type the IP address of the host machine in the text field and click OK. You must know the host IP address in order to play over the Internet.
- **LAN Games:** To join a game on a local area network, type the IP address or the name of the host computer in the prompt and click OK. To search for any valid host machine, leave the dialog box blank and click OK.

If the host computer isn’t located, an error message appears. Click OK on the error prompt to return to the **Two Player Game window**.

## **Start New Game/Load Game**

Once two machines are connected, both players see a message in the **Two Player Game window** that indicates a successful connection and identifies the computer to which they are connected. At this point, the **Main Menu** updates and displays new controls:

- **Start New Game:** Start a new two-player game. This opens the **Select Scenario window**, from which you can choose any available scenario.
- **Load Saved Game:** Load a previously saved game. You can only load two-player saved games when in two-player mode. Either player can start or load a game.

A Chat (red telephone) icon appears on the updated **Main Menu**. Click this icon to send text messages to your opponent during the setup mode. Just type your message and press **ENTER** to send.

Click Disconnect on the **Two Player Game window** to return to the **Main Menu** before the game begins.

## **Connecting Through a Firewall**

When attempting to play a two-player game on a computer that uses a software or hardware firewall, you might have to change some settings in order to connect.

Some firewalls automatically prompt you when an attempt is made to send data from a program that the firewall doesn't recognize. If the connection fails, you might need to manually configure your firewall to open the following ports:

- 6073
- 2032 through 2400

If you are attempting to use an Internet connection through a network router with NAT, you must configure the router's Port Forwarding to forward the above-listed ports to your local computer's IP address.


If you are unfamiliar with changing your firewall settings, consult your firewall's documentation.

## **Playing the Two-Player Game**

Once you and your opponent are connected, the two-player version of *Chris Sawyer's Locomotion* plays nearly identically to the single-player game, with a few exceptions:

- Human opponents are not bound by the time restrictions for entry of new companies — both human-controlled companies are present from the moment the game starts.



- 
- The game's only speed-related controls are Play and Pause. When either player pauses in a two-player game, the game pauses for both players.
  - Above the **Time Display**, there is a **Send Message** control. Click this to send text messages to your opponent. Type a message in the prompt and press **ENTER** to send it. Messages from your opponent appear in a pop-up window tagged with the opponent's image.

All single-player scenarios are available in the two-player version. Two-player saved games are stored in a folder separate from single-player saves. You cannot load a two-player saved game in single-player mode (or vice-versa).

The game automatically disconnects when either player quits the game.

# CHRIS SAWYER'S LOCOMOTION BASICS

## THE OBJECT OF THE GAME

Your company starts with a modest bank loan and a simple survey map. Where you go from there is, well, your business.

Your underlying mission in *Chris Sawyer's Locomotion* is always the same: deliver cargo and passengers from one place that produces them to another place that requires them. You must provide necessary services to the towns and industries in the areas you serve. If you do a good job, you are rewarded with a burgeoning bank account and a high Performance Index. If you are unable to meet the transportation needs of the people, your Performance Index drops... along with your profits.

In order to complete each scenario, you must successfully reach defined goals. Your first few *Chris Sawyer's Locomotion* games might seem a bit overwhelming — there can be a lot to think about at once, especially once rival companies enter the scene. However, if you understand the basic game systems and take a measured approach to planning and building transport lines, you'll soon be at the top of your own transport empire.

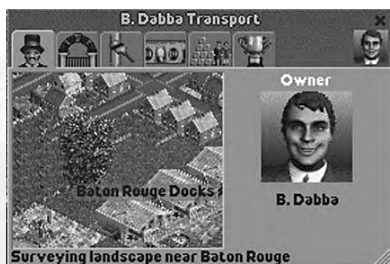
## FIRST STEPS

Each scenario begins with a view of the game world. Pause the game and take some time to scroll around the landscape and check out the terrain features, towns, and industries. Once you've done an initial survey, it's time to set up your company.

Unless you set a preferred owner name in the Miscellaneous Options section of the **Game Options menu** (see "Game Options Menu" on page 14 for details), entering your name is the first task. There are a number of additional company-related tasks that you need to attend to before you get started. All of these initial options are set on the **Status window**.

## Status Window

The **Status window** automatically opens when you start a new game. To open the **Status window** while playing, click the owner icon on the **Status Display**. There are six tabs on this window:



## Company Owner and Status

- **Status View:** Shows the viewpoint of the company owner. The **Status View** is most useful for “spying” on other company owners, to see where they are building, or what they have their sights on next. Click the cluster of arrows in the lower-right corner of the **Status View** to centre the game screen on the area shown.
- **Owner Image:** The owner image is randomly selected at the start of each scenario. Click your owner image to select a new one.
- **Owner Name:** The owner name appears below the owner image. Click on the name to change it. You can also click on the title bar of the window to change the name.

### TIP

Use the Status View to keep an eye on your opponents. If they're surveying the landscape, chances are they're about to build in that location.

## Details

The **Details section tab** shows basic company performance statistics and allows you to construct and view the company headquarters.



- **Company started:** The year the company was founded.
- **Performance index:** The company's current Performance Index.
- **Owner:** The owner's name.

When viewing a computer-controlled opponent's **Status window**, the owner's Intelligence, Aggressiveness, and Competitiveness ratings appear below his or her name. (See "Rival Owner Characteristics" on page 65 for details about competing owners and companies.)

The image on the right side of this display shows the company's headquarters (if one exists). Click the icon on the right edge of the window to construct your headquarters. Select a spot on the landscape and click to construct the building. Construction is completed after a short time.

To move your headquarters to a different location, click the construction icon and then click the new headquarters location. When construction begins on your new headquarters building, the old one is automatically destroyed.

You can operate your company successfully without a headquarters, but building this structure is quite inexpensive, and its growth and changes in style (or lack thereof) over the course of the game serves as a visual symbol of your success.

## Colour Scheme

The **Colour Scheme** tab allows you to specify colours for your company displays, structures, and vehicles. You can set both an overall colour scheme for your company and a specific colour scheme for every vehicle type.



- **Main colour scheme:** Defines the background hue of your window title bars and the colours used on your buildings. The two coloured squares show the currently selected colours. To pick a new colour, click on a square to open the palette of available colours and then click on a new colour.
- **Special colour schemes used for:** Defines the colours for individual vehicle types. Click checkbox beside the vehicle type to display the vehicle type's current colour scheme. Change the colours as described above.

## Finances

The **Finances** tab shows a breakdown of the company's income and expenditures, company value and current profits, and provides an interface for applying for and paying off loans.

[illegible]

- **Expenditure/Income:** Shows the company's profit and loss for each year.
- **Loan:** Shows the total amount of money owed to the bank. Click the up arrow to the right of the loan amount to borrow more money, and click the down arrow to pay down your loan.

## TIP

If you run out of cash and need some more, be sure to check with the bank to see if they'll loan you more money. Banks continue to raise your credit rating as you progress in the game.

- **Cash:** The current amount of cash available.
- **Profit from Vehicles:** The monthly profit or loss you are incurring from vehicle operations.

### Cargo Delivered

This tab provides information on cargo successfully transported and delivered.

**B. Dabba Transport – Cargo Delivered**

Cargo delivered:

- 57,500 tons of Chemicals
- 82,800 tons of Coal
- 25,971 tons of Food
- 12,047 crates of Goods
- 35,200 tons of Grain
- 43,900 tons of Iron Ore
- 51,296 items of Livestock
- 5,053 bags of Mail
- 50,925 tons of Oil
- 131,070 Passengers
- 37,300 tons of Lumber

## Challenge



The **Challenge** tab provides an overview of your goals in the current scenario, including a summary of your progress, and, if the scenario has a time limit, the time remaining to achieve these goals.

## SURVEY THE LANDSCAPE

After naming your new company and double-checking your objectives, you need to determine your first transportation task. Should you haul grain with trucks, build a railroad and carry coal to a steel mill, set up a bus line in the biggest town? The choices are usually many, but not all of them make sense as your first venture.

You generally start a new game with enough cash to build a modest transportation network. Once that starts to turn a profit, you are able to afford more expensive vehicles and more ambitious routes.

One of the best resources for surveying the landscape is the **Mini-Map**. You can examine the landscape, towns and industries with the game paused, which is usually a good idea at the beginning of the game. Click Pause on the **Time Display** (or press the **Pause** key) and then open the **Mini-Map**.

### Mini-Map



The **Mini-Map** provides a strategic overview of the territory covered in the scenario. To open the **Mini-Map**, click Map on the **Zoom** menu or click the **Mini-Map** icon on the **Time Display**.

Click a spot on the **Mini-Map** to centre the main game view on that area. The black dashed-line rectangle defines the area that is currently displayed on the main view.

On the right side of the window is a list of items, each of which is represented by a different colour on the **Mini-Map**. Moving the mouse cursor over an item causes every object of that type to flash on the **Mini-Map** for easy identification. This **Mini-Map** has five tabs:

## Default View

The default **Mini-Map** view provides a basic overview of the scenario landscape. It shows the locations of towns, industries, roads, railroads, stations and vegetation.



## Vehicles View

The **Vehicles** view shows the locations of all vehicles in the game. Holding your cursor over a vehicle type on the right causes the corresponding objects to flash on the map and show the number of vehicles of that type currently deployed.

## Industries View

The **Industries** view shows all of the industries currently in the scenario, and is probably the most important **Mini-Map** tab early in the game.

The total number of industries is shown in the space just below the map. When you place the mouse cursor over an industry on the list, this number changes to show how many facilities of that type exist. The supplies or demands of that industry type are shown in parentheses next to the industry type.



## Transport Routes View

The **Transport Routes** view displays all of the land, air, and sea routes that are currently operational. The routes are broken down by type for easy identification.



## Companies View

The **Companies** view lists all of the companies in the game. In this view, the map breaks down the routes, vehicles and stations by the company that owns them.



## TIP

Getting too ambitious too quickly is a good way to go bankrupt. In many scenarios, setting up simple bus or tram services within towns is a safe way to start. It not only provides a steady income, it encourages population growth.

## Supply and Demand

One factor that leads to success is keeping track of available cargo and determining where this cargo is required.



You can assess the transportation needs of the community at a glance by moving your mouse cursor over the buildings, stations, and industries in each town. When the cursor passes over a building, a pop-up shows what the building is, the cargo it produces and what deliveries it accepts. You can deliver and unload cargo that is not accepted at a station, but you are not paid for it. In this situation, the unwanted cargo simply sits at the station and waits for you to pick it up again.

In order to pick up and unload cargo, you must build stations — cargo loading bays, passenger stops, airports, docks, and so on. Open a station's **Station Overview window** to assess the station's needs. (See "Stations" on page 53 for details.)

# INDUSTRY

The industries in each scenario generally provide a large percentage of your potential transport business. Some industries provide goods and raw materials from the surrounding land. Farms, mines, oil wells, and managed forests, for example, all produce cargo that is just waiting to be transported.

Other industries, such as sawmills, flourmills and oil refineries, require the raw materials produced by the aforementioned industries in order to produce products. Once they have the raw materials they need, these industries start stockpiling goods that you can transport as cargo.

## The Industry List

Select Industries from the

**Town/Industry** menu to open the **Industries** window. You can also open

the **Industries** window by right-clicking on any industry building.

The left tab of the **Industries** window shows a scrolling list of all industries and three columns of information:

- **Industry:** The name and type of industry.
- **Status:** What the industry is currently producing or what the industry requires in order to begin production.
- **Production Transported:** The percentage of the industry's total cargo output that is currently being transported.

Industries		
Industry	Status	Production Transported
Aosta Farm	Producing Livestock	0%
Aosta Food Processing Plant	Requires Livestock or Grain to produce Food	0%
Aosta Ski Centre	Requires Passengers to produce Passengers	0%
Basel Factory	Requires Chemicals or Steel to produce Goods	0%
Basel Sawmill	Requires Lumber to produce Goods	0%
Bellinzona Forest	Producing Lumber	0%
Bern Chemical Works	Producing Chemicals	0%
Biel Factory	Requires Chemicals or Steel to produce Goods	12%
Biel Paper Mill	Requires Lumber to produce Paper	0%
Biel Printing Works	Requires Paper to produce Goods	0%
Biel Sawmill	Requires Lumber to produce Goods	0%
Biel Winery	Requires Grapes to produce Food	0%
Brig Ski Centre	Requires Passengers to produce Passengers	0%
77 industries		

### TIP

Right-click an industry on the landscape to quickly display the Industries window

To obtain more detailed information on any listed industry, click on it to access its **Industry Status window**. (See “Industry Status Window” below.)

The second tab opens the **Fund New Industries view**. This section of the window displays a scrolling list of industry buildings. From here you can fund the construction of new industries. This is expensive, and is not a viable option early in the game (see “Funding New Industries” on page 85 for details.)

## The Industry Status Window

Like other buildings, the products and requirements of an industry are displayed when you move the mouse cursor over the industry building. To obtain detailed information on an industry’s production and statistics, click the industry on the landscape to open its **Industry Status window** or click its name on the **Industries window**.

The **Industry Status window** has three tabs.

### Industry

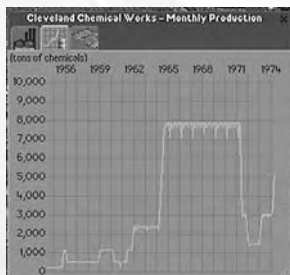
The **Industry tab** shows a status view of the industry. To centre the main view on this industry, click the gray arrows in the lower-right corner of the image. Listed below the image are the items it requires (if any) and the goods it produces.



### Monthly Production

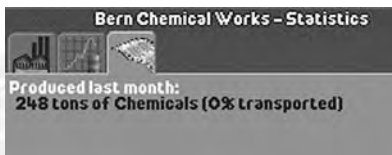
The **Monthly Production tab** shows a graphic representation of the facility’s production. The line graph charts the number of cargo units produced on the left and the game year along the top.

Industries that require the delivery of raw materials in order to produce goods — factories and steel mills, for example — show production growth only when they receive a steady supply of the materials they need. It is up to you (or your competitors) to ensure a steady flow of materials to these facilities.



## Statistics

The **Statistics** tab is the most important tab to examine before deciding whether to build a transport route to a particular industry. It shows the amount of required goods or raw materials the industry has produced or received in the past month, and the amount of produced goods that have been transported away from the facility. Use this display to determine whether it's worth investing in transporting cargo from this industry.



## MANIPULATING THE LANDSCAPE

Not all locales are ideally suited to construction. Before you build roads, lay tracks and perform other tasks to expand your transportation empire, it is often necessary to reshape the landscape. The **Landscape** menu provides the following tools to help you accomplish your earthmoving chores:

- Clear Area
- Adjust Land
- Adjust Water
- Plant Trees



### Clear Area



The Clear Area option allows you to clear areas of trees and other obstacles — including houses and other man-made objects — from the landscape. (To clear roads and tracks, use the tools on the **Build Roads** and **Build Tracks** menus.)

Select the Clear Area tool to open the **Landscape window** to the **Clear Area** tab. The graphic in the centre of the window shows the size of the “brush” you are using. The number of brush squares indicates the number of terrain squares you clear each time you click the landscape. Click the + and – buttons in the corners of the graphic to adjust the brush size. Click on the landscape to clear it.

## TIP

If your Local Authority Rating is too low, you might not be allowed to clear an area around a town (see “Local Authority Rating” on page 61).

As you move the cursor over the land, the cost of clearing the land encompassed by the brush appears at the bottom of the Landscape window. The number of objects cleared determines the price. You can also remove an obstacle from the landscape by right-clicking on it.

## TIP

Some landscape elements — trees, for example — are cleared automatically when you build track, roads, and so on in the squares they occupy. The cost of clearing these items are automatically added to the construction cost.

## Adjust Land

This tool allows you to change the height and slope of a land square (or group of land squares).

### *Raising and Lowering Land*



When in Adjust Land mode, the cursor is a shovel attached to a grid (brush) that defines the area of land you affect as you make your changes. The number of brush squares indicates the number of terrain squares you will raise or lower at a time. Click the + and – buttons in the corners of the graphic to adjust the brush size.

Click and hold the left mouse button. Move the mouse away from you to lower the land section or toward you to raise it.

If the land in the defined area isn't level — that is, some parts are higher than others — the land evens itself out first and then moves up or down as a unit.

Every land square you raise or lower costs money for each unit of height change. As you move the cursor over the landscape, the cost of raising and lowering the area defined by your brush is displayed at the bottom of the **Landscape window**. Objects such as trees, and houses are automatically cleared from the land square when you raise or lower it, and you are charged accordingly.

## TIP

You are charged for every change you make. Every time you adjust land height, you pay for it. Be decisive. If you drag the land tile up and down repeatedly trying to get it “just right,” you quickly drain your bank account!

### ***Changing Slope***

You can change the slope of a land square by raising or lowering only one corner at a time. To do this, set the brush size to one square. Next, move the brush onto the land square you want to change, and adjust the pointer so that only one corner of the square is highlighted. Once the cursor is positioned, click and drag the mouse to raise or lower the selected corner.

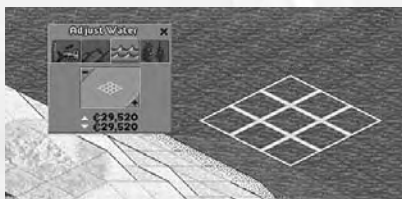


## TIP

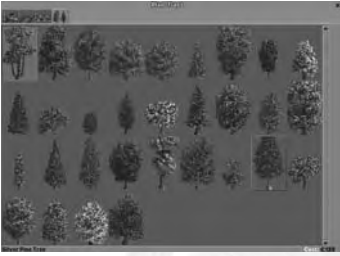
When using a brush size of one square, you can raise the whole square or a single corner. The cost is the same, so be sure to select the entire square if that's what you want to raise or lower.

### **Adjust Water**

You can create lakes, canals and other waterways using the Adjust Water tool. It works nearly identically to the Adjust Land tool (see “Adjust Land” on page 35).



## Plant Trees



The towns that you serve enjoy on-time cargo delivery and a good passenger transportation infrastructure — but they also love nature. If you cut down too many trees around a town, your Local Authority Rating drops (see “Local Authority Rating” on page 61).

Planting trees near a town helps to stabilize and improve your Local Authority Rating. A few well-placed trees can even soothe town officials who are unhappy because you’ve destroyed too many of their town’s buildings in the name of progress.

Select Plant Trees from the **Landscape menu** to display available foliage. The types of trees available vary by scenario.

Click on a tree and then click on the landscape where you want to plant it. The cost of planting the selected tree is shown at the bottom right of the **Landscape window**. You can rotate some trees to change their appearances. If the selected tree can be rotated, a rotational arrow appears on the right side of the window. Click the arrow to rotate the tree to a different view or press the Z key.

### TIP

Not all species of trees grow in all climates.

## BUILDING ROADS

Part of building a transportation empire is ensuring that your vehicles can get from their source to their destination. Early on, this often involves building roads. To build a road, right-click on an existing section of road or select a road type from the **Roads menu**. There are three types of roads available:





- **Rough Roads:** These two-way unpaved thoroughfares are the cheapest to build, but restrict the speed of the vehicles.
- **Roads:** Paved roads are more expensive, but allow two-way traffic, higher speeds.
- **One-Way Roads:** These paved roads allow traffic flow in only one direction. One-way roads are generally used to build divided highways — two side-by-side roads running in opposite directions. If you have a particularly busy route or a road that covers a long distance, divided highways allow faster vehicles to pass their slower counterparts.

When the **Build Roads window** opens, the cursor automatically changes to a road-building cursor. The arrow on the cursor indicates the direction that the road will take when you start building it (and, in the case of One-Way Roads, the direction of the traffic flow when the road is built). Click the Rotational Arrow at the bottom of the **Build Roads window** to change the road section's facing, or press the Z key. When the road is facing in the direction you want to build, click the terrain square where you want to place it.

The main view of the **Build Roads window** is divided into several sections:

- **Curve:** Determines whether the section you are about to build is straight or curved. Click a button to select the desired curve. A preview of the road section appears on the **Build This button** and the cursor indicates the shape and direction of the proposed road section.
- **Slope:** Determines whether the section of road you are about to build is level or at an uphill or downhill grade. A preview of the road section appears on the **Build This button** and the cursor indicates the shape and direction of the proposed road section. For more detail on dealing with slopes see "Slopes" on page 72.



- **Bridge:** When an uphill or downhill slope is selected and the slope cannot be built without building a bridge, a drop-down menu of bridge types appears (see “Bridges” on page 73).
- **Build This:** The **Build This** button shows a preview of the road section you are about to build and its construction cost. Click this button to build a new road section at the flashing point on the main view. Each time you click the button, a new road section of the displayed type is constructed.

The bottom section of the **Build Roads window** displays tool icons required in the road construction process:

- **Rotational Arrow:** Click this button to change the facing of your initial road section before you place it. Once you place the initial section, the Bulldozer and Crosshair icons replace the Rotational Arrow.
- **Bulldozer:** Click to destroy the previous section of road (the section behind the current position of the build road cursor). When you destroy a section of road, you receive a partial refund for cost of the road section destroyed. To destroy sections of a previously built road, right-click on the road section and then click the Bulldozer.
- **Crosshair:** Click to halt construction in the current location and select a new starting point for a road.

## TIP

You can use a shortcut when adding sections to an existing road. Move the cursor onto the end of the existing road and right-click to begin construction. The tool automatically defaults to the type of road to which you are adding the new section.

## The Stations Tab

The second tab at the top of the **Road Building window** allows you to build stations and passenger stops along your roadways. See “Stations” on page 53 for details on building cargo and passenger stations and stops on roads.



## BUILDING RAILROADS

Railroads provide a faster means of transporting cargo and passengers from place to place, especially when long distances or large cargos are involved. Creating an efficient rail network requires forethought, planning and practice. Your first rail lines are likely to be simple, but you'll have to build more advanced lines in order to compete in more advanced scenarios. The basic track-building tools are presented here, for information on advanced rail-building, see "Working on the Railroad" on page 76.

Select a track type from the Tracks menu. There are up to three different track types in each scenario:

- **Railroad Track:** Standard railroad track.
- **Narrow Gauge Track:** Typically used in mountainous terrain, narrow gauge track can make sharper turns and climb steeper slopes than standard railroad track. Narrow gauge trains are smaller than standard trains, and their carrying capacity is less than their standard-sized counterparts.
- **Tram Track:** Trams are strictly used for passenger transportation in urban areas. Tram tracks are laid in parallel pairs that can be connected at the ends, creating a closed loop. Unlike other types of tracks, tram tracks can be built along existing roads.



### TIP

Tram tracks are more expensive per section than railroad tracks, but the trams themselves are more economical to run if passenger service is your goal.

To select a track type from the menu, click it to open the **Build Tracks window**.

When adding to an existing track, move the cursor onto the end of an existing track section and right-click to begin construction. The tool automatically defaults to the type of track to which you are connecting the new section.

## **Build Tracks Window**

The main view of the **Build Tracks window** is nearly identical to that of the **Build Roads window**. Follow the same procedures used for building roads when building tracks (see “Building Roads” on page 37 for details).

### ***Stations***

The second tab on the **Build Tracks window** allows you to build stations for your railways and tramways. (See “Stations” on page 53 for details on rail and tram stations.)

### ***Track Electrification/Enhancement and Signals***

The **Build Tracks window** has up to two additional tabs that allow you to build special track enhancements and signals along your rail lines.



This tab accesses track enhancements required for certain train types. Each selected enhancement is automatically added to every track section you build while the option is checked. Track enhancements increase the construction cost of each track section.

Depending on the scenario and track type, one or more of these enhancement options might be available:

- **Electric 3rd Rail:** An electrified rail that provides power to some electric trains.
- **Overhead Elec. Wires:** A series of poles and overhead wires that provide power to some electric trains and trams.
- **Rack Rail:** When a narrow gauge railroad is built on an uphill or downhill slope that is too steep for the engine to climb by normal means, a central cogwheel must be mounted on the engine. This wheel grips a third “rack” rail and provides additional traction when climbing and descending hills. Not all narrow gauge engines are equipped to use rack rails. (See “Slopes” on page 72 for more details.)

### TIP

Add rack rails only on steeply sloped sections of track. Adding them to the entire track is expensive and severely limits the train's speed.

Check the statistics of the train type you intend to build to determine what enhancements you need to incorporate into the track.

To add enhancements to an existing track section, select the enhancement or enhancements you want to add. When you do so, a drop-down menu appears below the enhancement options. Choose one of the following options from the menu:

- **Single Section:** Add the enhancement(s) to a single section of track.
- **Block Section:** Add the enhancement(s) to all connected track up to the next signal in all directions from the clicked square. If there are no signals placed along the track, this option functions identically to the All Connected Track option.
- **All Connected Track:** Add the enhancement(s) to all track sections connected to the clicked square.

To add the selected enhancement(s), move the cursor over the section of track to which you want to add it and click.

## Signal Construction



The **Signal Construction** tab allows you to place track signals along your rail lines. Track signals warn train engineers of dangerous situations on the track ahead. Properly placed signals can prevent disasters. If you want to run more than one train on a track, you need to install signals.

There are two signal types. The difference between the two signal types (and the different styles within each signal type) is purely cosmetic. All signals perform the same function, and all are equally effective.

- **Colourlight:** Signals trains using coloured lights. There are several models of colourlight signals.
- **Semaphore:** Signals trains using one or more arms that are arranged in a pattern to identify the impending situation.

To place a signal, select the signal type from the drop-down menu. Two images of the selected signal appear in the window — a two-way signal that serves trains approaching from either direction and a one-way model that serves trains approaching from a single direction. (Trains are not allowed to pass a one-way signal going in the wrong direction.)



Click the model you want to build, and move the cursor over the track section where you want to build it. If you select a one-way signal, an arrow appears on the track to show the direction of travel the signal serves. Click to place the signal.

The proper placement of signals along your rail lines takes practice. See “Signals” on page 78 for more information.

## BUILDING VEHICLES

Start vehicle construction by selecting a vehicle type from the **Vehicle Construction menu**. There are up to six choices, depending on the scenario:

- **Build Trains:** Build trains for both standard and narrow gauge tracks.
- **Build Buses:** Build buses to transport passengers.
- **Build Trucks:** Build trucks to haul cargo.
- **Build Trams:** Build rail-bound passenger vehicles.
- **Build Aircraft:** Build passenger and cargo aircraft.
- **Build Ships:** Build ships to carry passengers and cargo.



When you select a vehicle type from the **Vehicle Construction menu**, the Build Vehicles window opens. Tabs display each vehicle type listed on the **Vehicle Construction menu**.

The **Build Vehicles window** includes the following elements:

- **Vehicle List:** Lists pictures and names of all available vehicles of the selected type. Move the mouse cursor over a vehicle to highlight it and display its statistics. Click on a vehicle to buy it.
- **Vehicle View:** A rotating image of the vehicle currently highlighted on the Vehicle Menu.
- **Vehicle Statistics:** Lists of statistics for the highlighted vehicle, including cost, monthly operating cost, the year it was designed, its requirements, power, weight, and maximum speed.

In scenarios where both standard and narrow gauge trains are available, two tabs appear on the **Build Vehicles window** directly above the **Vehicle Menu** when **Build Trains** is selected. These tabs toggle between standard and narrow gauge railroad vehicles.

## Building Vehicles



To build a vehicle, click its name on the Vehicle List. This deducts the cost of the vehicle from your available cash and opens the **Vehicle Information window** for that vehicle. The cursor changes to allow you to place the vehicle on the landscape.

When you are building a train, you can add cars before or after you set it on the tracks. Continue clicking cars on the Vehicle list to add them to the newly constructed train. As each car is built, it is added to the train's Vehicle Information window.

### Vehicle Information Window

The **Vehicle Information window** displays options and controls to place the vehicle on the landscape and to operate it. This window opens automatically when you build a new vehicle. To open the Vehicle Information window for a selected vehicle at any point during the game, click the vehicle on the landscape or click the vehicle's name on the **Vehicle Status window**.

#### TIP

If you close the Vehicle Information window before you place a vehicle on the landscape, it still incurs operating expenses but produces no income. To locate an orphaned vehicle, open the Vehicle List window, find the missing vehicle on the list and click its name (its status shows "No Position").

The vehicle's name appears on the title bar. To change a vehicle's name, click the title bar. You can open the **Vehicle Information window** for vehicles belonging to rival companies for observation purposes, but you cannot issue orders or make changes to vehicles that don't belong to you.

The **Vehicle Information window** has five tabs.



## Show View

The vehicle's position on the landscape is displayed in the **Show View** tab. To centre the main view on the vehicle, click the gray arrows in the lower-right corner of the image. The text below the image describes the current activities and speed of the vehicle.



If the vehicle is not currently on the game landscape — immediately after the vehicle is constructed, for example — the vehicle view is not displayed. Instead, a prompt appears instructing you to place the vehicle on the landscape. To place the vehicle on the landscape, click in an appropriate square.

### TIP

If you are unable to place a train on a track, it usually means that another train is in the way. To avoid this problem, use signals to designate blocks of track into which only one train can enter. See “Signals” on page 78.

While in Show View mode, up to four control buttons appear along the right side of the window:

- **Stop/Start Vehicle:** Set the vehicle in motion or stop it in its current location (or in the case of aircraft, at the next airport). When the vehicle is stopped, the flag is red; when the vehicle is in motion, the flag is green.
- **Place/Remove Vehicle:** If the vehicle is not currently on the game landscape, you can click this button to switch the cursor to Place Vehicle mode. When the vehicle is on the landscape and stopped, this button changes to a Remove Vehicle button. In this mode, click the button to remove the vehicle from the landscape.
- **Pass signal at danger:** This button, which appears only when the **Vehicle Information window** for a train is selected, orders the train to pass a track signal at which it would normally stop.
- **Change direction:** Click this button to change the vehicle's heading by 180-degrees. This button is only available when the vehicle is stopped.

## TIP

Use the “Pass signal at danger” command with caution — ignoring signals can lead to costly collisions.

### Vehicle Details

This tab lists the image and name of the vehicle and any attached cars. Vehicle statistics appear below the vehicle list, including total power, weight, maximum speed, and vehicle reliability. In the case of attached vehicles, these numbers apply to all attached cars.



For attachable vehicles, the vehicle list provides an interface for changing the order of the attached cars. To change the position of a car, click and drag it to a new position. Release the mouse button when the car is positioned where you want it.

In Vehicle Details mode, there are up to three control buttons on the right side of the window:

- **Modify vehicle:** Click this button to add onto attachable vehicles — to add cars to a train, for example. When you click the button, the **Build Vehicles window** opens, displaying compatible vehicles. (For details, see “Refitting a Vehicle” on page 69.)
- **Place/Remove Vehicle:** This button is identical to its counterpart in the Show View mode.
- **Sell Vehicle:** Click to sell the current vehicle. When you do so, the vehicle’s sale price is automatically added to your bank account. To sell an individual car, drag it onto the trashcan.

## TIP

In the case of attachable vehicles (trains, etc.), clicking the Sell (Vehicle) button sells the entire train including the locomotive and all attached cars. To sell an individual car, drag it to the trashcan.

## Cargo

Select this tab to display an image of the selected vehicle and a summary of the amount and type of cargo it is carrying. The text at the bottom of the window shows the total number of cargo units the vehicle is carrying.



Some vehicles are “refittable” — you can update them to carry one of several types of cargo. When the selected vehicle is refittable, a Refit button appears on the right side of the window. For details on refitting, see “Adding to and Refitting Existing Vehicles” on page 69.

## Finances

The **Finances** tab shows a summary of all of the vehicle’s monetary statistics. The following stats are displayed:



- **Last Income:** The day, month, and year of the last cargo delivered by the vehicle, the cargo type and amount, the transport distance and transit time, and the amount of money earned on the run.
- **Last journey average speed:** The average speed of the vehicle over the course of its most recent run.
- **Monthly Running Cost:** The amount of money the vehicle costs to run and maintain monthly. In the case of attached vehicles, this is the cumulative cost of maintaining all cars.
- **Monthly Profit:** The monthly profit of the vehicle based on activity during the past few months.
- **Sale value of vehicle:** The amount of money that would be added to your treasury if you sold the vehicle. In the case of attached vehicles, this is the sale price of all cars combined.

## Route

The **Route tab** allows you to set station stops and waypoints for the selected vehicle, and provides a number of routing-related controls.

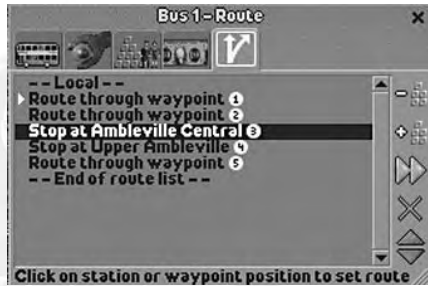
The Route List shows all of the current waypoints, orders and stops set for the vehicle. Click the Local/Express toggle at the top of the list to switch the vehicle between local and express service. A Local vehicle stops at all stations between route waypoints. An Express vehicle only stops at the waypoints on its route.

To highlight an item on the route list, click it. To centre the main game view on a stop or waypoint, double-click it on the Route List. When a vehicle is in motion, a white arrow on the Route List indicates its next destination.

As you click waypoints, and stops on the landscape, they are automatically added to the Route List in the order clicked. Waypoints and stops are numbered to indicate their order. Orders, waypoints, and routes are explained in “Planning Vehicle Routes and Stops” on page 70.

There are up to six buttons available along the right side of the window in this mode:

- **Unload all cargo:** Click this button to insert an order to unload all of the cargo the vehicle is carrying. If the vehicle can carry more than one cargo type, click and hold this button to display a menu of available cargo types and then select one.
- **Wait for full load:** Click this button to insert an order for the vehicle to wait for a full load of cargo at a station stop. If the selected vehicle can carry more than one cargo type, click and hold this button to display a menu of cargo types and then select one.
- **Skip to next order on list:** Orders the vehicle to skip to the next order on the Route List. Click the button once for each order you want the vehicle to skip.



- **Delete last/selected order:** Click this button to delete the currently highlighted order/stop from the Route List. If no order is highlighted, clicking this button eliminates the order added most recently.
- **Move selected order up/down the list:** Click these buttons to move the currently highlighted order up or down the Route List.

## Vehicle Status Window

Although your vehicles take care of themselves for the most part, it is important to monitor their activities to ensure

that your transport routes remain profitable. The **Vehicle Status window** helps you track down and monitor your planes, trains, ships, and road vehicles.



Name	Monthly Profit	Age	Reliability
Train 7 - Stopped	\$38,394	6 years	52%
Train 1 - Loading at Cleveland West	\$21,850	0 years	90%
Train 4 - Approaching Tallahassee South at 23mph	\$18,148	8 years	45%
Train 5 - Approaching Savannah Lakeside at 60mph	\$11,022	7 years	46%
Train 2 - Approaching Norfolk at 10mph	\$7,126	0 years	90%
Train 5 - Heading for Miami Lakeside at 60mph	\$2,008	7 years	46%
Train 8 - Approaching Baton Rouge North at 5mph	\$5,782	0 years	87%

Click the **Vehicle Status menu** icon to open the **Vehicle Status window**. This window has one tab for each vehicle type. The following information is displayed for each vehicle on the list:

- **Name:** The name and picture of the vehicle, as well as a description of the vehicle's general activities and speed.
- **Monthly Profit:** What the vehicle is currently earning.
- **Age:** The number of years the vehicle has been in service.
- **Reliability:** The vehicle's reliability rating. (See "Vehicle Reliability" on page 69 for details.)

If you need additional information on a particular vehicle or you want to pinpoint its location on the landscape, click the vehicle's name to open its **Vehicle Information window**.

## MESSAGES

Occasionally, messages appear to inform you of important and interesting game events. These messages take one of two forms:

a pop-up window, or a ticker message that scrolls across the top of the **Time Display**. **News windows** close on their own after a few seconds, but you can close a news window manually by clicking the X button in the upper-right corner of the window, or by pressing the **Spacebar**.

If a **News window** includes graphics that illustrate the event, you can click the graphic to open an associated window.

You can access a list of recent messages and control the type and form of the messages displayed throughout the game by clicking the date/ticker display at the top of the **Time Display**. This opens the **Message window**, which contains two tabs.

### Show Recent Messages

The left tab accesses a scrolling menu that lists the headlines of recently-received messages. Click a message headline to view a complete message in a pop-up news window.



### Message Options

The message options tab lists the six message types that appear in the game and allows you to control how they are displayed.



- **Own company major news:** Messages concerning important events pertaining to your company.
- **Other company major news:** Messages concerning important events that occur at rival companies.
- **Own company minor news:** Trivial messages concerning your company's achievements — new speed records and similar items.
- **Other company minor news:** Trivial messages concerning the achievements of rival companies.
- **General News:** Scenario events that can possibly affect any company — the startup and shutdown of industries, reduced industry production, and so on.
- **Advice:** Game-related hints and tips.

Click an option on the drop-down menu to change how each message type is displayed.

- **Off:** Messages of this type are not displayed in any form.
- **Ticker Message:** Messages of this type are displayed as scrolling ticker messages on the **Time Display**.
- **News Window:** Messages of this type are displayed in a pop-up news window.

# RUNNING YOUR TRANSPORTATION EMPIRE

The following sections explore the object and goals of *Chris Sawyer's Locomotion*, and provide the additional information you need to run and monitor an effective transportation company.

## STATIONS

Stations are the loading and unloading points for cargo of all types. Without stations, your vehicles wander the landscape aimlessly and serve no purpose. Stations are classified by the type of vehicles they serve:

- **Road Stations:** Serve trucks and buses. Road station types include cargo loading bays, passenger stops, and passenger terminuses.
- **Rail Stations:** Serve all tracked vehicles. They include stations and tram passenger stops.
- **Airports:** Serve airplanes and helicopters.
- **Docks:** Serves ships.



## Station List Window

Name	Status	Total waiting	Accepts
Tallahassee East	80 crates of Goods + 130 bags of Ma...	595 units	Food, Goods, Mail, Oi...
Cleveland Mines A	482 tons of Chemicals waiting	482 units	
Tallahassee South	385 crates of Goods + 18 Passenger...	401 units	Oil, Passengers
Columbus Airport	244 bags of Mail + 12 Passengers wa...	256 units	Food, Goods, Mail, Pa...
Kansas City Mines A	243 tons of Iron Ore waiting	243 units	
Washington DC Central	216 crates of Goods + 17 Passengers...	231 units	Chemicals, Passage...
Kansas City	215 items of Livestock waiting	215 units	
Cincinnati Docks	219 tons of Coal waiting	219 units	
Ottawa East	208 Passengers waiting	208 units	Passengers
Dallas Docks	132 tons of Oil waiting	132 units	
85 stations			

You can view information about all of your stations in the **Station List window**. To access this window, open the **Stations menu** and select the station type you want to view. The **Station List window** has five tabs:

- **All Stations:** Lists every station type.
- **Rail Stations:** Lists railroad and tram stations.
- **Road Stations:** Lists road stations.
- **Airports:** Lists airports.
- **Docks:** Lists docks.



The following information is listed for each station:

- **Name:** The name and type of the station.
- **Status:** The number cargo units currently waiting at the station, by cargo type.
- **Total Waiting:** The total number of cargo units of all types currently waiting at the station.
- **Accepts:** A list of the cargo types the station accepts.

Click the station name to open the Station window for that facility. (See “The Station Window” on page 58 for more details.)

## Building a Station

For road and rail stations, access the station-building controls by clicking the **Stations** tab on the appropriate build menu. To build a dock or airport, select that station type from the **Port** menu. This opens the **Station Construction** window.

The **Station Construction** window has three tabs:

- **Station Type List:** Lists all available station types. Open the list and click the desired station type to select it.
- **Station View/Cost:** Displays an image of the station selected on the Station Type list. When you move the cursor over a suitable location on the main game view, the cost of building the station appears directly below the station image.
- **Catchment Area Report:** When the cursor is placed over an appropriate station location on the main game view, the bottom section of the **Station Construction** window displays a report of the cargo that will be accepted and produced within the station’s defined catchment area were the station to be built on that spot. (For more information, see “Station Catchment Area” on page 55.)

To construct the station, move the cursor over a suitable terrain square and click. All station types have restrictions on their placement, as described later.

All stations are company-owned — you cannot load or unload cargo at another company’s station.



## Station Catchment Area

Every station has a catchment area that defines the area that it serves. The catchment area for the station you are building is highlighted in blue when you place the cursor over a suitable build site.



When you hold the cursor over a potential site, the Catchment Area Report at the bottom of the Station Construction window shows the cargo types accepted and produced in the projected catchment area.

### TIP

Select station sites that provide a good balance of accepted and produced cargo. Also, avoid building stations whose catchment areas overlap those of other stations — unless you are attempting to steal business from a rival company or you find that a single station cannot handle the cargo volume for a given region.

## Road Stations

Road stations are cargo and passenger pickup and drop-off points that serve trucks and buses. There are three road station types.



## Cargo Loading Bay

Cargo loading bays are used to load and unload non-passenger cargo from trucks. They are two lanes wide, so two trucks can load and unload cargo simultaneously. Cargo loading bays can only be built at the end of a rough or standard road. You cannot construct them on one-way roads.

## ***Passenger Stop***

Passenger stops are designated roadside pick-up and drop-off points for passengers that you can construct on any road type. Buses and trams can stop briefly at passenger stops to deliver and discharge people, but cannot remain at these stations to wait for a full load of passengers. On the main game view, passenger stops appear as small signposts along the side of the road.



## ***Passenger Terminus***

Like a passenger stop, a passenger terminus serves as a pick-up and drop-off point for passengers. You can only build this station type at the end of a road, but a passenger terminus has two advantages over a passenger stop:

- It allows buses to wait for a full load of passengers, thus maximizing the profit potential of the vehicle.
- It allows two buses to load and unload simultaneously.

## ***Rail Stations***

Stations can be placed on any straight and level section of railroad or narrow gauge rail tracks (including on bridges), but not on tram tracks. Rail stations are universal — they accept both passengers and cargo.



You can build a rail station up to 16 squares in length. Multiple stations built in adjoining terrain squares automatically merge to form one large station.

Any size rail station can load and unload any size train. However, the speed at which a train is loaded or unloaded is based on the size of the station in relation to the size of the train. A 10-car train can be unloaded at a single-square station, but it takes much longer than it would at a 12-square station (10 squares for the cars and two squares for the locomotive).

The best rule of thumb is to build rail stations as long as the longest train running on the rail line. This maximizes loading and unloading efficiency and minimizes delays.

## Airports

Airports allow you to transport cargo and passengers from one point to another across areas that aren't connected by roads or tracks — even locations that aren't on the same landmass. Although

they can carry all cargo types, aircraft are better for passenger transport than for cargo transport in most situations.



### TIP

You need at least two airports in order to set up aircraft routes — planes must travel between two compatible airports. Until you can afford to build two airports, don't bother with this type of station.

The sizes and type of airfield affects the number and type of aircraft it can accommodate and serve.

- **Small Airport:** A limited-capacity airfield available from game years 1919 through 1940.
- **Medium Airport:** A larger field that serves a wider variety of aircraft than its smaller counterpart. Available from 1935 through 1975.
- **Large Airport:** The biggest and most modern airfield in the game. Available starting in 1970.

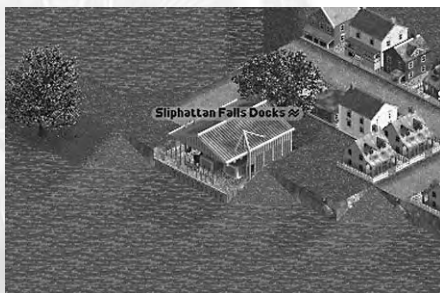
- **City Heliport:** A helicopter pad on top of a building. Can serve as base for a single helicopter. Available starting in 1952.

## TIP

Airports (other than city heliports) are extremely expensive to build. You can greatly minimize the cost by only building these facilities in locations that require a minimum of landscaping.

## Docks

Docks can also link two locations not connected by land routes. Ship transportation offers exceptional cargo capacity, but is slow. Like airports, docks serve as terminals for both passengers and cargo.



Docks must be constructed along a coastline bordering a river, lake, or ocean. Each dock can service one ship at a time. Docks are like rail stations in that docks built adjacent to one another automatically merge into a single station, increasing the vehicle loading and unloading efficiency of the facility.

Ships can only travel between docks — they cannot stop at any other type of facility. Like airports, docks must be constructed in pairs in order to set up transport routes.

## The Station Window

You can monitor the efficiency of stations, passenger stops, airports and docks using the **Station window**. To open this window, click the name of the station on the landscape, or click the station's name on the **Station List window**.

## TIP

Right click a station on the landscape to open the Station List window.

The station name appears in the window's title bar. Click it to change a station's name. The **Station window** has three tabs:

### **Station**

The **Station tab** shows an image of the station. To centre the main view on the station, click the gray arrows in the lower-right corner of the image. An overview of the cargo types and number of cargo units available is displayed just below the station image.



### **Cargo Waiting and Accepted**

This tab shows a list of the cargo waiting for transport at the station and the types of cargo the station accepts.

Click the button to the right of the menu to highlight the station's catchment area on the landscape.



### **Cargo Rating**

The Cargo Rating panel tracks the station's effectiveness. For more information on cargo ratings, see "Station Management" on page 75.



# TOWNS AND CITIES

Towns and cities provide you with excellent sources of transportation revenue. The relationship between your company and the towns and cities that dot the landscape is symbiotic — if you do your job well, the cities thrive, and so do your profits.

## Towns List

Select Towns from the **Town/Industry** menu to open the **Towns List** window, which contains the following information:

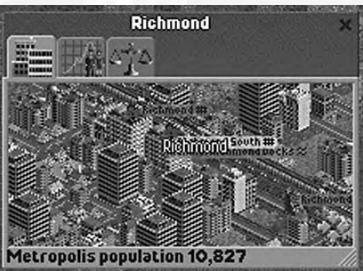
Towns			
Name	Type	Population	Stations
Ambleburg	Town	552	0
Ambleville	City	5,672	4
Applehall	Town	652	2
Brokenwell	Town	549	1
Broomburg	Village	334	0
Bunboro	Village	435	2
Drumstone	Town	449	1
Eaglehattan	Village	270	0
Finway	Metropolis	21,976	3
Inchburg	Town	573	0
Overston	Town	516	0
Parkton	Metropolis	13,949	1
Shuttleton Creek	Town	1,452	2
16 Towns			

- **Name:** The name of the town.
- **Type:** Town types range from Hamlet (smallest) to Metropolis (largest).
- **Population:** The current population.
- **Stations:** The number of stations in the town built by all of the companies in the game.

To obtain more detailed information on a town, click its name on the **Towns List** window or on the landscape. This opens the **Town Information** window.

## Town Information Window

The **Town Information** window provides detailed information on the status of a town and how that that town’s government views the activities of your transport company and those of your rivals. There are three tabs on this window:



### Town

This displays status view of the town centre. Click the gray arrows in the lower-right corner of this image to centre the game view on the selected town.

The size and population of the selected town appear below the town image.

## Population Graph

This shows a line graph that charts population increases and declines throughout the scenario.

A constantly rising population is a sign of town expansion — which, in turn, is a good indicator that you (or your competitors) are adequately providing for the town's transportation needs.



### TIP

As a town's population increases, keep an eye on passenger availability in the town and provide additional passenger transportation as needed — that's where the real money is.

## Town Ratings

The **Town Ratings** tab displays the Local Authority Rating for each of the companies that serve the town. These ratings show the attitude the town government has toward you and your competitors. (See "Local Authority Rating" for details.)



## Local Authority Rating

A company's Local Authority Rating tracks a town's attitude toward the activities of the company. This rating is based on the effectiveness of the company's transportation ventures in the town and the amount of demolition and deforestation that the company has performed in the area. If you destroy a lot of trees and buildings or your transportation services in the area are sub-par, your Local Authority Rating drops. If your rating drops too low, the town government will forbid you from demolishing in their area.

Local Authority Rating is separate from Cargo Ratings (which affect individual stations) and your Performance Index (which is an indication of your overall success).





Your current loan amount is shown on the Finances tab of your Status window. If you run low on funds, you can borrow additional money. Click the up arrow to the right of the loan field to borrow more money. Click on the down arrow to pay back your loan.

### TIP

Low debt is particularly important if the scenario goal calls for increasing your company value.

## Optimizing Your Finances

Learning how to optimize your finances to reap the greatest returns with the least possible debt is a delicate process. Here are a few basic tips for financial success:

- **Faster delivery = bigger profits.** The faster you get your cargo from its origin to its destination, the more you get paid. The payment rate for certain cargo types — food and passengers, for instance — drops off sharply over time. The payment drop-off isn't quite as sharp on other cargo types but every type of cargo loses value due to slow delivery. Check the cargo payment rates tab on the **Companies List window** for a graphic representation.
- **Longer delivery distance = bigger profits.** Another factor that figures into cargo payment rates is the distance the cargo is delivered. Cargo delivered over great distances (measured in "blocks" — land squares) leads to higher payment. Fast, long cargo routes are big money-makers.
- **Keep your vehicles up to date.** The older a vehicle gets, the less reliable it becomes. Replace unreliable and obsolete vehicles as soon as they begin to break down too often.
- **Manage your vehicle routes.** From time to time, revisit the routes your vehicles are following and make sure they remain effective. Update roads and tracks as necessary to prevent bottlenecks and delays. Add new stations in thriving areas and eliminate stations and stops that produce and/or accept minimal cargo.

- **Leech business from the competition.** Because you and your opponents are trying to accomplish the same goals, sometimes it is not enough for you to do well — you must ensure that your rivals do poorly. Keep an eye on your opponents' transportation ventures, and build your own routes into lucrative areas. If you serve your stations better than your opponents, you can grab the majority of the business. Even if you can't get a majority share, every little bit of cargo you divert from an opponent's station robs your rival of potential revenue.

## The Companies List

You can keep tabs on your opponents using the **Companies List window**. Place your cursor over the owner image on the **Status Display** to open the **Owners menu**, and click Companies List to open the window.



Company	Status	Performance Index	Company Value
Dumblebum Freight	Checking services near Charlotte	64.3% "Chief Executive"	\$209,408,854
B.Dabba Transport	Surveying landscape near Kansas City	62.9% "Chief Executive"	\$111,478,672
Ivory Freight	Surveying landscape near Charleston	40.6% "Route Supervisor"	\$37,003,180
Burgundy Shipping	Checking services near Omaha	28.4% "Transport Coordinator"	\$76,352,716
Buzzy Carts	Building Road near Kansas City	15.0% "Engineer"	\$3,496,126
Ripoff Haulage	Checking services near Kansas City	11.2% "Engineer"	\$1,594,204

6 companies

The **Companies List window** has seven tabs:

- **Companies:** Lists company name, owner status (the activities the owner is currently engaged in), Performance Index, and current value. To obtain additional information on a company, click its name to open that company's **Status window**. (See "Status Window" on page 26 for details.)
- **Company Performance Indexes:** This graph charts the rise and fall of each company's Performance Index. The company names are listed on the right side of the window, and each is represented by a different colour line on the graph. Move the cursor over a company name to make its line flash on the graph. (See "Performance Index" on page 66 for details.)

- **Units of Cargo Delivered per Month:** This graph charts the total number of cargo units delivered by each company each month, starting with the first month of the scenario.
- **Distance x Units of Cargo Delivered per Month:** The statistic charted on this graph multiplies the units of cargo delivered by the distance the cargo traveled to reach its destination each month. This statistic accounts for half of each company's Performance Index.
- **Company Values:** Tracks the rises and drops in each company's value starting in the first month of the scenario. Company value figures prominently in the goals of certain scenarios.
- **Cargo Payment Rates:** Illustrates the amount of money you make for transporting cargo based on the amount of transit time between pickup and drop-off. Payment rate is charted on the vertical axis, and time is charted on the horizontal axis.
- **Speed Records:** Accesses a list of speed records set by various companies. Displayed here is the owner image and company name, and the type, speed, and date that the record was set. Records are updated and added throughout the scenario.

## **Rival Owner Characteristics**

The characteristics of a computer-controlled company owner determine the way in which the company conducts business.

Each computer-controlled owner has the following three traits:

- **Intelligence:** The higher the owner's intelligence, the better they plan and compete.
- **Aggressiveness:** Aggressive owners expand their transportation networks faster. Owners with low aggression tend to build and expand slower.
- **Competitiveness:** Highly competitive companies go head-to-head with their opponents. They seek out existing routes and build their own competing routes in the same region to steal business. Owners with a low competitiveness trait tend to find their own routes well away from those of other companies.

You can view the traits of a computer-controlled owner by checking the **Company Details** tab on his or her company's **Status window**.

# MONITORING YOUR PROGRESS

The windows and displays described throughout this manual provide you with many ways to monitor your progress and the progress of your opponents. However, there are a few more statistics and displays that help you to assess the effectiveness of your play and monitor certain aspects of the game.

## Company Value

Company value is one of the many outward indicators of your success. A high company value means that your company is financially healthy, with lots of cash on hand, a steady source of profits, and low debt. Some scenarios require that you achieve a certain company value level in order to win. The following equation is used to calculate company value:

- Company Value = Cash – Loan + potential sale price of all currently active vehicles + (32 x current monthly profit of all vehicles)*

## Performance Index

Your Performance Index constantly monitors your proficiency. A high Performance Index shows that you are doing a good job. A low rating indicates that your efforts are not providing for the needs of the towns and people who are depending on you. This rating figures prominently in the goals for many of the scenarios.

Your Performance Index is expressed as both a percentage and a verbal rating. The Corporate ratings that correspond to each percentage score are listed in the following table.

VERBAL RATING	PERCENTAGE
Platelayer	0 – 9.9%
Engineer	10 – 19.9%
Traffic Manager	20 – 29.9%
Transport Coordinator	30 – 39.9%
Route Supervisor	40 – 49.9%
Director	50 – 59.9%
Chief Executive	60 – 69.9%
Chairman	70 – 79.9%
President	80 – 89.9%
Tycoon	90 – 100%

Your Performance Index is continuously updated and shown on the **Status Display**. When a green up-arrow appears next to the rating, your score is on the rise. When a red down-arrow appears next to the rating, the Performance Index is dropping. This statistic is calculated based on two factors:

- **Monthly Units of Cargo Delivered x Delivery Distance:** The amount of cargo you successfully deliver every month multiplied by the distance the cargo was delivered.
- **Monthly Vehicle Profit/Loss:** Positive cash flow with regard to your vehicles leads to a higher rating. Vehicles whose operating costs exceed their income detract from your rating.

Each of these factors accounts for 50% of your Performance Index. You can monitor these statistics and compare your statistics to those of other companies on the **Companies List** (see “Companies List” on page 64 for details).

The Performance Index is calculated exponentially, so doubling the number of units of cargo you deliver every month doesn't necessarily double your rating. The higher your rating, the more difficult it is to increase the rating further. In other words, expect large increases early in the game, and proportionally slower increases as the game progresses.

If you see your Performance Index dropping, check the profitability of your vehicles and cargo routes and eliminate those that are losing money. Also, check the supply and demand at the various stations and passenger stops, and establish new cargo and passenger routes in areas that aren't adequately served.

## ADVANCED STRATEGIES

A firm grasp of the basic game concepts is the first step toward success in *Chris Sawyer's Locomotion*. However, as you move on to progressively harder scenarios, the challenges you face demand that you expand your knowledge.

The following sections expand discuss concepts and strategies that should help you when the going gets rough.

## ADVANCED VEHICLE CONCEPTS

### Adding To Existing Vehicles

Some vehicles — trains and certain trucks — are capable of linking with other compatible vehicles to form a single unit. Once you build an attachable vehicle, you can link additional compatible vehicles to it at any time. To do so, open the **Vehicle Information window** for the vehicle, select the vehicle details tab, and click the **Modify Vehicle button**. This displays the **Build Vehicles window** with a list of compatible vehicles that can be added to the selected vehicle type.



To add to the vehicle, click an item on the Build Vehicles list. Once a new piece/car is added to an existing vehicle, it immediately becomes an integrated part of the vehicle. From that point on, the game treats all attached pieces as a single vehicle rather than multiple separate vehicles.

### TIP

As long as the Vehicle Information window of a compatible attachable vehicle is open to the Vehicle Details tab, building new vehicles attaches them to the selected vehicle. To build a separate vehicle, you must first close the Vehicle Information windows of all other compatible vehicles.

## Refitting a Vehicle

Certain vehicles are designated as “refittable” and can be modified to carry one of several different types of

cargo. To find out whether a vehicle is refittable, check its statistics on the **Build Vehicles window**. “Refittable” appears in the Capacity statistic for vehicles with this attribute.



The controls for refitting a vehicle are located on the **Cargo tab** of its **Vehicle Information window**. Open the window to this tab and click and hold the Refit button on the right side of the window to display a list of cargo types and amounts that the vehicle can carry. An arrow designates the type of cargo the vehicle currently carries. To refit the vehicle, click the new cargo type on the menu. A vehicle must be stopped in order to refit it.

### TIP

Refitting vehicles takes no time at all, and doesn't cost you a dime. It is a cost-effective way to transport multiple cargo types in a region using a limited number of vehicles.

## Vehicle Reliability

The reliability of your vehicles is a vital consideration. Even the best-planned transport route in the most lucrative town sees a significant drop in monthly income if the vehicles on the route keep breaking down.

When a vehicle breaks down, it ceases to function until it is repaired. Repairs take only a short time to complete and are performed automatically. While a vehicle is broken down, it earns no money, however, and can block other vehicles.

One exception is a train that has more than one locomotive. If one locomotive breaks down, the train's speed is only reduced as long as the other locomotive(s) attached to the train are functional.



You can check a vehicle's current reliability rating by selecting the vehicle details tab on the **Vehicle Information window**, or by checking the vehicle's status on the **Vehicle Status window**. The longer a vehicle remains in service, the lower its reliability becomes. When the vehicle becomes obsolete, it takes an additional reliability hit.

## TIP

When a vehicle's becomes too unreliable, it is likely to be costing you more than its worth. From time to time you should sell aging vehicles and replace them with newer, more reliable models.

## Planning Vehicle Routes and Stops

Simply placing a vehicle on the landscape and sending it on its way is no way to earn a profit. In

order to get the most out of a vehicle, you must define its route. To plan a vehicle's route and assign cargo stops, open its **Vehicle Information window** (described in the previous sections) and select the **Route tab**. This displays the vehicle's Route List and places the cursor in route mode.



There are several different items that can define a vehicle's route:

- **Station Stops:** A station stop on the vehicle's Route List orders the vehicle to stop at a designated station to pickup and discharge cargo. Under normal conditions, the vehicle only discharges the type of cargo the station accepts. A vehicle can only pick up the type of cargo with which it is compatible. To set a station stop, click on the station in the main view.
- **Passenger Stops:** A passenger stop is a point along a road or tram track where a vehicle can pickup and discharge passengers. To set a passenger stop, click on the station in the main view.

- **Waypoints:** Waypoints are numbered markers that allow you to fine-tune a vehicle's route. When no waypoints are set between stops, the vehicle chooses its own path from one destination to the next. If you place waypoints between stops on the Route List, the vehicle moves through all of the designated waypoints, following the route you choose. You can set vehicle waypoints in any location along the appropriate travel route. When the cursor passes over an appropriate waypoint position on the landscape, it changes to four inward-pointing arrows. To set the waypoint, click.

### TIP

Setting waypoints for trains traveling on complex tracks and ships sailing in open water is usually a good idea.

As mentioned earlier in the manual, you can also set two special cargo orders for a vehicle:

- **Unload all cargo:** When this command is in place all cargo is unloaded at the preceding station stop whether or not the station accepts that cargo type. You are not paid for a delivery of this type, and the unaccepted cargo simply sits at the station and waits for you to pick it up at a later time — you are only paid for the cargo when it is finally delivered to a station that accepts it. This order must be placed immediately after a station stop on the Route List in order to be effective.
- **Wait for full load:** When this command is in place, the vehicle waits at the station stop that precedes it on the Route List until it is filled to capacity and then moves on to the next destination on the Route List. This order has no effect at passenger stops — vehicles can only wait for full loads of cargo at stations and terminals. This order must be placed immediately after a station stop on the Route List in order to be effective.

Stops, waypoints, and orders are added to the Route List in the order they are selected. You can change the order of and delete items from the Route List using the controls next to the Route List.

## TIP

You can copy route orders from one vehicle to another by clicking another vehicle's orders while both windows are open. You can also click the other vehicle's 'end of list' marker to copy the entire route.

Click the Local/Express toggle at the top of the Route List to select a type of service for the vehicle.

- **Local:** Local vehicles stop at all stations and stops along the defined vehicle route regardless of whether the Route List orders the vehicle to stop there. Local routes are ideal for densely populated areas where busy stations are plentiful.
- **Express:** Express vehicles stop only at the stations designated as stops on their Route List, ignoring all other stops that they pass along the way. Long haul vehicles and vehicles carrying cargo that must be delivered to a distant destination in a timely fashion should be set to Express service.

You can toggle a vehicle between local and express service at any time.

Setting up effective and efficient vehicle routes is a task that takes some practice. As you experiment with different routes and orders, keep an eye on the vehicle's progress and profitability, and change the route as necessary to increase the vehicle's efficiency.

## BUILDING ON DIFFICULT TERRAIN

Not all roads and tracks run along flat level ground. Obstacles — both natural and manmade — often get in the way of your expansion efforts. Several advanced road and track concepts help you get around (or through) these difficult situations.

### Slopes

You can build standard railroad tracks on a shallow slope — one unit of increase or decrease in height over two terrain squares. In order to achieve this, you must build a bridge, since terrain always rises or falls at a minimum of one unit of



height per square. Note that certain bridge types are not suitable for slopes. (See “Bridges” below for details.)

Roads, narrow gauge railroad tracks and tram tracks can be built at steep angles — one unit of increase or decrease in height over a single terrain square. If the positioning of the road and the slope of the landscape are an exact match, you can build steeper-grade roads and tracks directly on the terrain. When the terrain and the projected course of the road/track don't match up, you must construct a bridge to fill the gap and support the road/track.

Road vehicles and trams are equipped to handle any grade without assistance, but narrow gauge trains require the addition of a rack rail — a central rail that is gripped by a cogwheel in the train engine — in order to negotiate steep slopes. Not all narrow gauge engines are equipped to use a rack rail, so make sure you choose the proper type when travel on steep slopes is necessary. (See “Building Tracks” and “Building Vehicles” for details on rack rails and vehicle statistics.)

## Bridges

When the terrain requires it, the Bridge menu appears below the grade options on the **Road Building window**. There are six bridge types, each with its own unique characteristics:

- **Wooden Bridge:** Wooden bridges are the most economical, but they are limited in height and can only accommodate slow vehicle speeds. Wooden bridges must be built level — you cannot slope them up or down. Wooden bridges accommodate curves, junctions, and straight tracks and roads.
- **Brick Bridge:** Brick bridges are the most versatile in the game. They accommodate curves, junctions, straight roads and slopes. However, brick bridges are limited to medium height and moderate vehicle speeds.



- **Suspension Bridge:** Suspension bridges accommodate high vehicle speeds and can be built higher than any other bridge type, thus making them ideal for spanning deep canyons. Suspension bridges are limited to straight roads, and cannot accommodate junctions or slopes.
- **Steel Girder Bridge:** Steel girder bridges cannot be built on slopes, and are limited in height. They can, however accommodate curves, junctions, and vehicles of any speed.
- **Steel Arch Bridge:** Steel arch bridges are more economical than steel girder bridges, and share the same “no speed limit” advantage and height limitations. The trade off for a lower price is that steel arch bridges do not accommodate curves, slopes, or junctions.

When you are building a road or track and you come to a change in terrain that requires a bridge, the game automatically constructs a bridge to span the gap. The default type of bridge built in this instance is determined by the currently selected bridge type and the terrain. To ensure that the game constructs the type of bridge you want, select a preferred bridge type from the bridge menu before you start building your road/track across the gap.

## TIP

If you want to build a junction into a bridge type that doesn't accommodate junctions, you need to delete the bridge section where you want to build the junction and replace it with a compatible type, such as steel girder or brick.

## Tunnels

Changing the landscape to make way for roads or tracks is not always feasible, especially in mountainous terrain. For a price, you can tunnel through rugged terrain so that your vehicles can continue on their way without having to navigate around the hills.



Building tunnels is as easy as building roads and tracks in open terrain. In order to start a tunnel, you need a vertical cliff face. You might have to do a bit of terrain altering to get the proper surface (see on page 34 for details). Once the hillside is properly prepared, simply continue building the road or track through the mountain.

To select an underground starting point for a road or track section, hold down the Shift key while in road/track construction mode and move the cursor into the area where you want to start the road/track. When the cursor passes over an appropriate starting point, the Underground view option automatically engages, allowing you to place your first road/track section.

### TIP

Press the Shift key while building tracks or roads to start construction underground.

## STATION MANAGEMENT

Station management plays a big role in your transport empire. You can build a large station next to a thriving livestock farm, for example, but your share of livestock cargo is limited if the transportation to and from that station is inefficient.

Every station has a cargo rating based on how well it is serving the needs of its catchment area. Steady and efficient movement of cargo in and out of the station leads to a high rating. Allowing cargo and passengers to pile up at a station causes the cargo rating of the station to drop. A different rating is calculated for each cargo type associated with the station.

You can see a station's cargo rating in the third tab on its **Station Overview window**.

The cargo rating determines the percentage of available goods and passengers in the catchment area that is available at the station. For example, if the station's coverage area produces 100 units of iron ore and the station's cargo rating for iron ore is currently 75%, 75 units of iron ore appear at the station for delivery. The other 25 units simply disappear if there is no other station in the area.

## TIP

You can often improve your cargo rating at a train station by running a number of short trains through the station rather than one long train. This keeps the interval between departures shorter, which in turn leaves less time for cargo to accumulate.

When two or more stations have overlapping catchment areas, the cargo ratings of the stations determine the percentage of cargo and passengers available at each station. For example, if your station has a cargo rating of 50% and a competitor's station in the same coverage area has a rating of 75%, the competitor's station receives proportionally more cargo.

It is vital that you keep the cargo rating of all of your stations as high as possible. Make sure that your vehicles make frequent stops at the station to avoid allowing cargo and passengers to pile up.

## TIP

Servicing a station with faster vehicles is one way to improve its cargo rating.

## WORKING ON THE RAILROAD

As you take on the challenges of the more advanced scenarios, you'll find that trains play an increasingly important role in the game. An understanding of the elements that go into creating an effective rail network is vital to your success as a transport tycoon.

### Locomotive Power

Every type of vehicle in the game has a power statistic, but this stat is particularly important when it comes to locomotives.

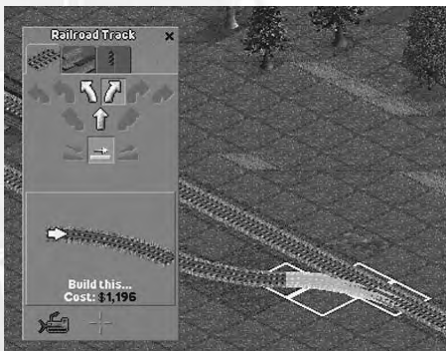
The amount of weight that a locomotive can effectively pull is based on its power rating. If you attach too many heavy cars to a locomotive, the train's rate of acceleration slows considerably. In addition, an underpowered, overloaded train has difficulty going up hills. You can avoid this problem by attaching more than one locomotive to heavier trains to increase the total pulling power, or by replacing the existing locomotive with a more powerful model.

## TIP

Make sure your train has a locomotive! The game allows you to build individual train cars and place them on railroad tracks — but without a locomotive attached, they won't get very far.

### Building Junctions

As your railroad network grows, you are bound to encounter situations when you need to merge one track into another. This could be part of a simple dual-track design to create an efficient straight-line rail network between two stations, or part of a complex track layout that connects multiple destinations.



Creating a junction — a place where a new track merges into or crosses an existing track — is a relatively straightforward process. Open the **Build Tracks window** and place the build cursor on the section of track where you want the junction. If the purpose of the junction is to branch off onto another track — to allow the routing of multiple trains to different destinations, for example — the first section you build at the junction point should be a curved track that leads in the direction you want the junction to lead, as shown in the illustration. This type of junction allows trains to transition from one track to the other.

Another type of junction is a simple 90-degree junction where two perpendicular tracks cross. This type of junction doesn't allow trains to switch from one track to another — it is simply a crossing of two different rail networks. A 90-degree junction requires four signals — one on each section of track entering the junction (see "Signals" on page 78). To avoid building signals and the possible slowdown in service this type of junction will cause, you can build a slope and a bridge that causes one track to cross above the other.

Other examples of track junctions are illustrated in "Effective Track Design" starting on page 78.



## Signals

A single train on a simple track layout runs smoothly on its own. However, when you want to operate more than one train on a single railroad, you need to install signals.

Signals divide your track network into block sections and prevent more than one train from entering a block section. A proper understanding of how signals work and where to place them can prevent costly delays and collisions.

As mentioned in “Building Tracks Window” on page 41, there are two types of signals — colour light and semaphore. Other than the cosmetic differences between the two, they are basically identical and operate with equal effectiveness. (The signal types and sub-types are included in the game for purposes of historical accuracy.) Both colour light and semaphore signals are available in single- and dual-direction models.

Dual-direction signals provide information for trains approaching from either direction. These are used on any track section where two-way traffic is possible, such as the 90-degree junction mentioned recently.

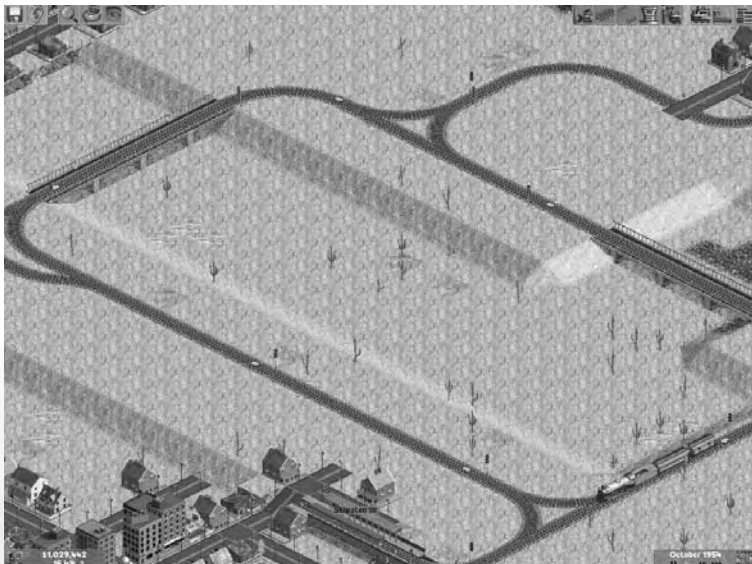
Single-direction signals are used to move traffic in one direction — only trains approaching the signal in the proper direction are allowed in the block section defined by single-direction signals. This is effective when creating dual tracks that are used by multiple trains that all visit the same stations. A series of single-direction signals is also a good idea on a simple loop layout if you intend to run more than one train on the loop.

## EFFECTIVE TRACK DESIGN

The following sections show several track configuration ideas that illustrate a number of effective track layouts. In addition to these examples, you might want to run through “Tutorial 3: Building a rail service between two towns” (accessible via the Show Tutorial button on the **Main Menu**).

### Basic Loop

A simple loop track layout is ideal for circling a city or for connecting several towns or industries in succession for the transportation of people or cargo. This layout is designed for one-way traffic — one or more trains running in the same direction at all times.



Signals are placed at intervals around the loop, all facing the same direction of travel. The distance between the signals should be enough to accommodate the longest train you plan to run on the line. If a train stretches between two signals, it could cause a slowdown.

This layout shows only two stations, but you can add as many as you need to accommodate cargo and passengers along the way. The stations should ideally be as long as the longest train.

The number of trains you place on a track configuration of this type should be based on the size of the layout and the number of signals in place. The bigger the track and the more signals you place, the more trains you can effectively run.

### TIP

When running multiple trains, all trains will move only as fast as the slowest train on the track, so there is no advantage in adding fast trains to the route when more than one train is present unless all of the trains are fast.

## Basic Double Track Line



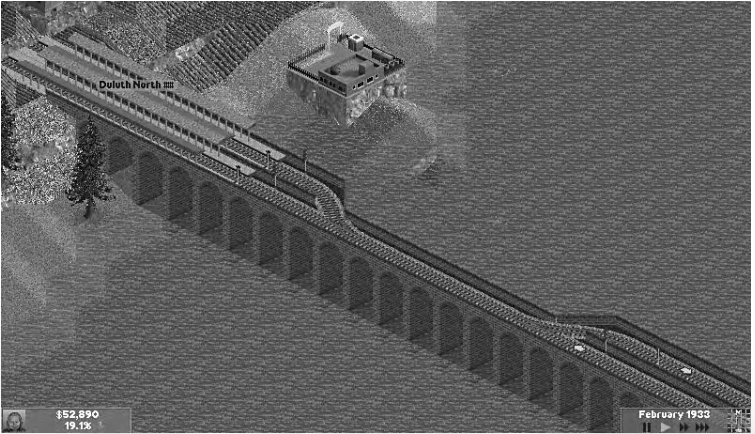
This layout is a simple double-track line connecting two stations, one at either end of the line. The two tracks in the double-track section run in opposite directions, and each has single-direction signals facing in the direction of travel placed at regular intervals along the way. As is true in the previous example, signals should be spaced no shorter than your longest train.

The single track sections at either end of this layout must be longer than the longest train, otherwise the train will be unable to turn around.

### TIP

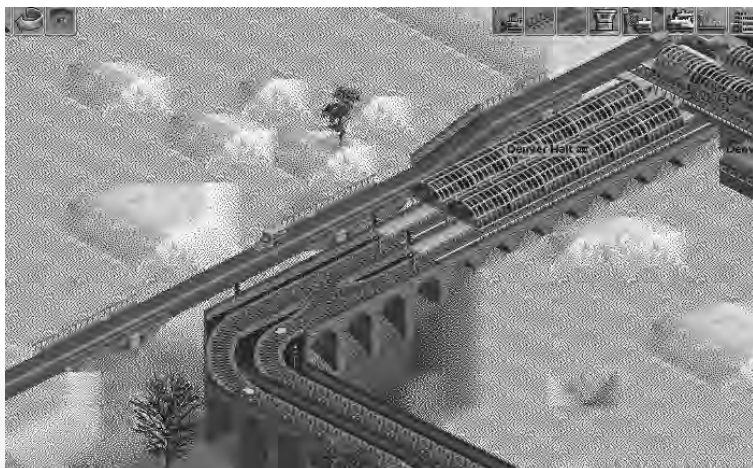
In *Chris Sawyer's Locomotion*, you don't have to construct a loop at the end of a straight line track to allow a train to turn around. Trains automatically turn in place at the end of the line provided they have a straight track section that is at least as long as the train itself in which to do so.

## Enhanced Double Track Line



This example, which builds on the basic double-track line described earlier, replaces the single track and single platform station at either end with two platforms that are constructed in parallel along dual tracks. Note the signal placement at the stations. In order to allow both platforms to be used simultaneously, you must build signals on both tracks just outside the station before the junction tracks join. These signals must be dual direction signals so that trains can pass in both directions.

Although this example shows only two parallel stations, you can conceivably place more stations in parallel at each end of the track to accommodate more trains.



Another variation on the enhanced double track layout involves joining two tracks into a single track and then splitting them back off into a double track at an “X” junction. The results of this design variation are similar to those of the other advanced double-track design except that this arrangement is more compact and efficiency is increased because the junction is blocked for a shorter length of time as trains move through it.

### **Complex Double Track Layout**

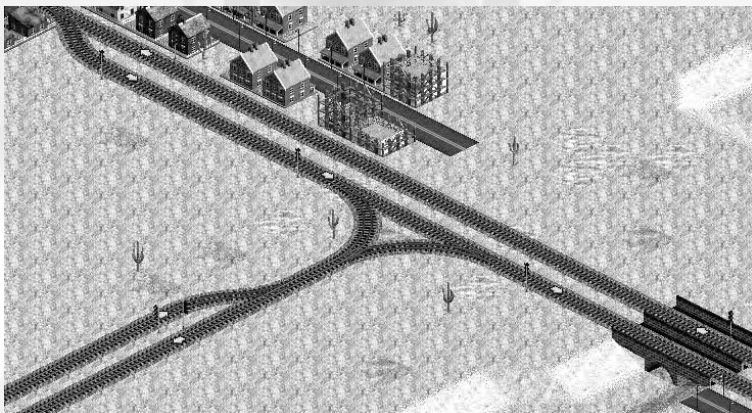


In this example, a double-track passenger line (designed using one of the methods previously described) connects three towns, and a mid-way station serves the central town. Theoretically, this station doesn't need to be any different than the ones discussed earlier — just add stations to each of the two tracks and that could be effective. However, as passenger traffic increases at this station, trains take longer to load and unload, holding up the other trains on the line — and costing you money in the process.

In this example, we've created two additional platforms at this central station, one in each direction, which significantly eases traffic through the station. Place single-direction signals just before and after the junctions in each direction, and make sure that all of the station platforms are as long as the longest train on the line.

This design is also effective in that it allows you to run a combination of local trains (trains that stop at every station along the line) and express trains. When the local trains stop at this station, the express trains can continue through unhindered.

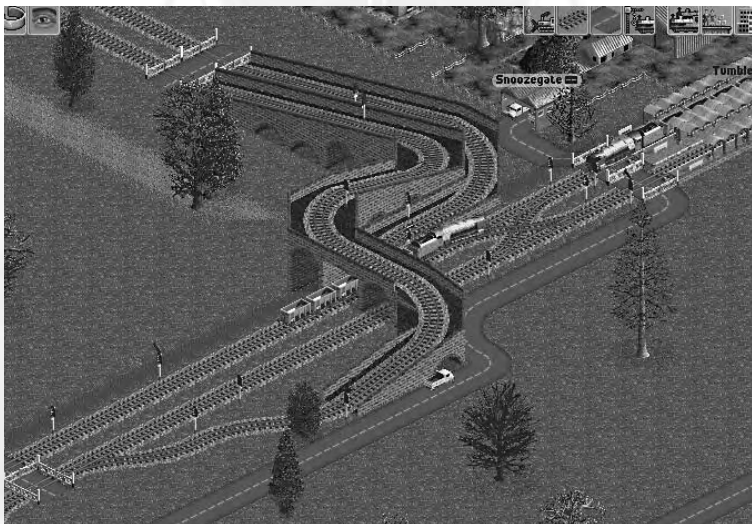
### **Junctions in Double Track Layouts**



Often, as you expand your train network to serve more towns, loop tracks and dual tracks that run in straight lines are impractical. For example, if you've already built a double-track line between Town 1 and Town 2 and you want to connect this existing track network to Town 3 (which lies due south of the track in the pictured example). The pictured junction allows you to run trains between Towns 1 and 2, 3 and 2, and 1 and 3. Note the direction and positioning of the signals at the junction.

There are some drawbacks to this type of junction. First, you cannot run trains directly between Town 2 and Town 3 (the junction is in the wrong direction). This can be remedied by building additional junctions.

Another drawback is that a train crossing the junction blocks all other routes as it passes through. If you are running a lot of trains on this track network, this can lead to frequent slowdowns and delays.



A solution to the delay problem is to construct the junction as a “fly-over” junction. Instead of curving the northern-most track in this example across the oncoming eastbound track, you instead curve the junction off to the north, slope the track upward, and then curve back south over a bridge that spans the track.

## INDUSTRIES

The basics of industries and their role in the game are discussed earlier in the manual. There are, however, a number of things you can do — both positive and negative — that impact industrial output.

### Interfering With Industry Output

The cargo output levels of many industries are affected by their surroundings. For example, a grain farm's output depends on the number of fields around it. If the fields the farm is using, get cleared or covered up — by trees, roads, tracks, buildings, and so on — output drops.

Take extra care not to destroy the resources that allow local industries to produce in your haste to expand your transportation network. If space is available, these industries might attempt to increase output — in this example, by creating new fields in the surrounding landscape squares — but the best way to ensure a steady production rate is to avoid the random destruction of valuable industry resources.

### Funding New Industries



To further increase your revenues, you can establish new industries. To fund the start of a new industry, open the **Industries List** window to the **Fund** tab. (See “Industry List” on page 32 for details.)

Click an industry to select it. When the industry is selected, the cursor changes to a build cursor. As you move the cursor over the terrain, the cost of constructing the industry is shown in the lower-right corner of the Industries window. To build the industry, left-click the terrain.



The industry types you can fund in this manner are limited to industries that produce products as opposed to raw materials — factories as opposed to mines, for example. Funding such an industry can be useful if you have a raw material-producing industry in the area that is producing cargo that isn't required by any other industry currently in the scenario. By building an industry that requires this cargo, you are creating a new potential cargo route.

There are a couple of disadvantages to funding industries. First, it is expensive. Second, once the industry you spend millions to fund is up and running, all of your rivals have access to it. Unlike the stations and track that are yours exclusively when you build them, funded industries are in the public domain. So, that new source of revenue you create for yourself might enhance your opponents' bankrolls as well.

# SCENARIO EDITOR



*Chris Sawyer's Locomotion* includes a full-featured scenario editor that allows you to modify existing scenarios and to create your own entirely original scenarios to play and share with other players. This editor makes it easy for anyone to become a scenario designer.

This manual doesn't cover the theory of balanced game design — it simply gives you the information you need to start working with the editor. As you play the game, take note of all of the elements that make each of the included scenarios balanced and fun to play, and keep these elements in mind when you start creating worlds of your own.

To start the scenario editor, click on the Scenario Editor button on the **Main Menu**.

## SCENARIO MAIN SCREEN

The main screen of the scenario editor contains a number of controls. In the top-left corner are two menu buttons that are similar to the menu selections in the game but with a few different options.

### Editor Options Menu

- **Load Landscape:** Load a saved landscape. Select the name of the landscape you want to load and click OK. In addition to landscapes you create, you can load any scenario files that are included with the game.



### TIP

Make a backup copy of any scenario file that you edit so that you can restore the scenario to its original state if necessary.

- **Save Landscape:** Save the landscape that you are currently editing.
- **Quit Scenario Editor:** Close the scenario editor and return to the **Main Menu**.

The remaining options on the **Editor Options** menu are identical to the corresponding options in the game. (See “Game Options Menu” on page 14 for details.)

## Sound Menu

The scenario editor **Sound** menu has a single option: Mute. This option functions identically to the corresponding option in the game. (See “Sound Menu” on page 18 for details.)

## Objects Window

The scenario editor main screen is dominated by the **Objects window**. This window allows you to fine-tune the game elements that go into your scenario. The controls and displays on the **Objects window** are described in the scenario creation walkthrough that follows.

## CREATING A SCENARIO — STEP-BY-STEP

This section describes the creation of a new scenario. To edit an existing scenario, first load it from the Editor Options menu and then follow the same steps outlined below for creating a new scenario.



Scenario creation is a relatively simple, step-by-step process that is presented in a series of screens. During each section of the process, there is a Forward to Next Step button in the lower-right corner of the screen. When you are finished with each step, click this button to move the next. If, after moving forward you decide you want to return to a previous step of the process, click the Back to Previous Step button in the lower-left corner of the screen.

### Step 1: Object Selection

The first step is to either select a world region or go the more advanced route and design and tweak every detail of your world before moving on.



If you choose the simple route, you need to simply select the region of the world in which you want to set your scenario. In addition to terrain differences, the world region affects the types and models of vehicles you have to choose from and the style of the buildings.

The illustration in the right portion of the window shows a sample of the architecture and vehicle style of the region you select.

If you select one of these options and move on to the next step, the editor generates a world with the default characteristics of the selected region. To fine-tune the elements of your game world before it is generated, click the Advanced button in the upper-right corner of the **Objects window**.

This changes the **Scenario Elements window** from a simple, one-tab window to one that contains 20 tabs, each of which includes a different set of scenario elements. Selecting certain elements (such as trains) will make other elements (such as tracks) required, and you will be unable to deselect them. Place the cursor over an object name to display more information about it on the right side of the window.



The tabs and their basic functions are as follows:

- **World Region:** Select the setting of your scenario.
- **Industries:** Select the industries that are present in the game. You can add and remove industries, up to a maximum of 16.
- **Buildings:** Select the buildings that are present in the world. You can add any number of buildings, mixing and matching styles at will, up to a maximum of 128 building types.

## TIP

Make sure you include a variety of building types (houses, office buildings, and so on) to ensure a good mix of generated and accepted cargo in the scenario. Also, make sure the building availability dates match the intended era of your scenario.

- **Climate:** Select a weather pattern from a list of six options.
- **Trees:** Select up to 64 different varieties of trees.
- **Vehicles:** Choose up to 224 vehicles that will appear in the scenario. Selecting a vehicle automatically selects its requirements (railroad track, overhead wires, etc.).
- **Airports:** Select the airport types available in the scenario.
- **Roads:** Select the types of road available in the scenario. There are only three basic road types (road, one-way road, and rough road) but there are a few graphic variations. Tram Track is also listed under the **Roads tab**.
- **Road Extras:** Select extra options for enhancing roads and Tram Tracks.
- **Road Stations:** Select road station types and styles.
- **Tracks:** Select railroad track types.
- **Track Extras:** Select available enhancements for railroad and narrow gauge tracks.
- **Track Stations:** Choose from among several rail station styles. Apart from cosmetic and year availability differences, all of these stations perform the same function. You must have at least one track station selected in order to effectively operate a train line.
- **Bridges:** Set the availability of bridge styles. See “Bridges” on page 73 for details on the functional differences between bridge types.
- **Level Crossings:** Select the crossing gate styles that appear in the game. There is no functional difference between crossing types, and they automatically appear at any junction where a road crosses a track
- **Signals:** Select the signal styles available in the scenario. There is no functional difference between signal types and sub-types — the variations are strictly cosmetic.

### TIP

You must have at least one signal type selected if you intend to operate complex train layouts.

- **Walls:** Select the walls and fences that automatically appear around industries and fields in the game.
- **Town Names:** Select a style for the town names that are generated when the scenario is created.
- **Land:** Choose up to 32 land textures for the scenario. When the map is generated, the editor uses only the selected texture styles.
- **Currency:** Set a single currency standard for the scenario.

In the case of items like industries and buildings, selecting items on these menus doesn't guarantee that all of the selected items will appear on the generated terrain. The selected items are merely those items that are available to the scenario editor when it generates the landscape.

When all of the options are set to your liking, click Forward to Next Step to proceed.

## Step 2: Landscape Generation

When you advance to step two, the editor generates a basic game map based on the options you defined in step one. You can scroll around the game view and zoom in and out just as you would in the game itself. At this point, a number of additional menus appear at the top of the screen:

- Zoom Menu
- Rotate Menu
- View Menu
- Landscape Menu
- Roads Menu
- Town/Industry Menu



These menus and their options function identically to their in-game counterparts, all of which are described earlier in the manual, with several additional options on certain menus (as described below). You can use these options to view the game world from any angle, to reshape the world, and so on before you move on to the next step.

## ***Landscape Menu***

The **Landscape Menu** in the Scenario Editor contains one option not present in the game version of the menu:

- **Build Walls:** Opens the **Landscape window** to the **Walls and Fences tab**. This tab shows all available walls and fences, and allows you to place them on the landscape. To build a wall or fence, select the style you want to build and click a landscape square to place it.

## ***Town/Industry Menu***

The **Town/Industry Menu** in the Scenario Editor allows you to place industries,

buildings, and even entire towns on the map in addition to its normal in-game functions.



The **Towns List window** in the Scenario Editor has three additional build tabs:

- **Build New Towns:** Select this tab to build a new town on the map. Select the town size from the drop-down list, and click the landscape to place the town.
- **Build Town Buildings:** Select this tab to construct individual buildings. Select the building type from the list of available buildings. Click the rotational arrow on the right to change the building's facing. Click the landscape to place the building.
- **Build Miscellaneous Buildings:** Select this tab to construct power lines, transmitters, and other miscellaneous structures. Select the structure you want to build from the list, and click the landscape to place it.

On the **Industries List window**, the Fund tab is replaced by a **Build tab** in the scenario editor. Select this tab to place new industries on the map. To build a new industry, select it from the list and click the landscape to place it.

## Landscape Generation Options Menu

The one new menu, to the right of the **Landscape menu**, is the **Landscape Generation Options menu**. Click this menu to open the **Landscape Generation window**. This window is open by default when step two begins, and it has five tabs:



### TIP

If you check the "Only generate random landscape when game starts" option, the game will automatically create a new landscape when a player begins that scenario.

- **Options:** Set the start year of the scenario and whether a random landscape is generated each time the scenario begins. There is also a button that generates a new landscape. Click this button to replace the current landscape with a fresh one. Note: Although you can create scenarios beyond the year 2000, the vehicles in the game are limited to the years 1900-2000.
- **Land:** Access controls for fine tuning topographical features. Set the height of sea level; set the minimum land height; select the basic topographical style; and control the density (frequency) of hills. All land types available in the scenario are listed in scrolling window. Each has a drop-down menu that allows you to select the distribution pattern of the land type.
- **Forests:** Controls forest features. Set the number of forests on the map; set the minimum and maximum number of terrain squares in each forest; set minimum and maximum forest density; select the number of random individual trees; and the minimum and maximum terrain altitude at which trees appear.
- **Towns:** Set the maximum number of towns, and the minimum size of each.



- **Industries:** Choose the approximate number of industries that can operate simultaneously in the scenario. Also on this tab are options that allow industries to shut down and/or start up during the course of the scenario.

All of the options you select here are guidelines that are used when the landscape for your scenario is generated when you load the scenario in the game. These options also apply when you click the Generate new landscape button on the **Options tab**.

When all of your landscape generation options are set and the generated map is to your liking, click Forward to Next Step to proceed.

### Step 3: Scenario Options

The third step in the process allows you to set the goals, competition level, starting conditions, and other options for your scenario. The **Scenario Options window** has four tabs:



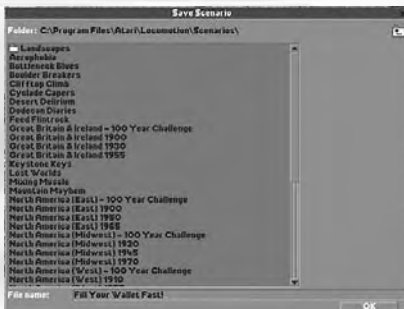
- **Scenario Challenge:** Set the goals a player must achieve to win your scenario. Here, you select a basic goal, the numerical/monetary value associated with the goal, and (if desired) a time limit and other ancillary options. The challenge text, as it will appear in your scenario's overview on the **Select Scenario window** in the game, appears at the bottom, and is updated as you select options.
- **Company Options:** Set the following for your scenario: the maximum number of competing companies (not including the player); a delay time before computer-controlled companies are established; and the preferred levels of computer company owner Intelligence, Aggressiveness, and Competitiveness. You can also select vehicle types that are forbidden to competing companies and/or the player's company. (For additional information on computer-controlled players and their statistics, see "Rival Owner Characteristics" on page 65.)

- **Financial Options:** Set the monetary options in the scenario, including the amount of the starting loan, the maximum amount that companies can borrow, and the yearly interest rate.
- **Scenario Options:** Access a few miscellaneous options that help to give your scenario polish and an identity. Enter a name for your scenario by clicking Change... next to the Scenario Name field and entering a name on the resulting prompt. Select the group (difficulty) in which you want your scenario to appear on the Select Scenario window. Finally, click the "Change..." button next to Scenario Details to enter a description of your scenario. This description appears below the scenario name on the **Select Scenario window**.

When all of your scenario options are set, click Forward to Next Step to proceed.

#### Step 4: Save Scenario

The only thing remaining at this point is to save your newly created scenario. When you proceed to Step 4, a standard Save dialog appears. If you entered a name on the **Scenario Options tab** in Step 3, this name appears in the File name field on the Save dialog. Otherwise, enter a name for the scenario.



After choosing a save directory and entering a file name, click OK to save the scenario. Player-generated scenarios are saved in the *\Chris Sawyer's Locomotion\Scenarios* folder. Remember that you can also save the landscape during any step of the creation process.

#### Step 5: You're Done!

After you save your new scenario, the scenario editor closes and you are returned to the **Main Menu**. If you want to create another scenario, click the Scenario Editor button to start the process again. Otherwise, dive into the game and start playing in your custom-created game world. Have fun!



## ALOITTAMINEN

### README-TIEDOSTO

*Chris Sawyer's Locomotion* -CD-ROM-peliin kuuluu ReadMe-tiedosto, joka sisältää käyttöoikeussopimuksen ja uusimpia tietoja pelistä. Lukemalla tiedoston voit hyötyä kaikista muutoksista, joita on mahdollisesti tehty tämän ohjekirjan painamisen jälkeen. Saat **ReadMe-tiedoston** näkyviin kaksoisnapsauttamalla ReadMe.txt-kuvaketta kiintolevyn *Chris Sawyer's Locomotion* -hakemistossa (yleensä C:\Ohjelmatiedostot\Atari\Locomotion). Voit avata ReadMe-tiedoston myös napsauttamalla Windows®-tehtäväpalkin Käynnistä-painiketta ja valitsemalla **Ohjelmat > Atari > Locomotion** ja napsauttamalla sitten View ReadMe (Avaa ReadMe-tiedosto).

### OHJEKIRJA

Tuotteen pelilevylle sisältyy myös Instruction Manual (Ohjekirja) -ohjeiden sähköinen versio .pdf-muodossa, Adobe Acrobat Reader 6 (jonka avulla voit lukea .pdf-muotoista ohjekirjaa).

### ASETUKSET JA ASENTAMINEN

1. Käynnistä Windows® 98/Me/2000/XP.
2. Aseta *Chris Sawyer's Locomotion* -pelilevy CD-ROM-asemaan.
3. Jos automaattinen käynnistys on käytössä, pelin alkunäyttö tulee näkyviin. Jos automaattinen käynnistys ei ole käytössä tai asennus ei ala automaattisesti, napsauta Windows®-tehtäväpalkin Käynnistä-painiketta ja valitse sitten Suorita. Kirjoita D:\Setup ja valitse OK. Huomautus: Jos CD-asemalle on määritetty jokin muu kirjain kuin D, käytä oikeaa kirjainta.
4. Viimeistele *Chris Sawyer's Locomotion* -pelin asennus noudattamalla näyttöön tulevia ohjeita.
5. Kun asennus on valmis, voit aloittaa pelin napsauttamalla Windows®-tehtäväpalkin Käynnistä-painiketta ja valitsemalla Ohjelmat / Atari / *Chris Sawyer's Locomotion* / Locomotion . Voit aloittaa pelin myös napsauttamalla Windowsin® työpöydällä olevaa *Chris Sawyer's Locomotion* -kuvaketta.

**Huomautus:** *Chris Sawyer's Locomotion* -pelilevyn on oltava pelin aikana CD-ROM-asemassa.

## DirectX®:n asennus

Chris Sawyer's Locomotion -pelin käyttämiseen tarvitaan DirectX® 9.0b tai uudempi versio. Jos tietokoneeseen ei ole asennettu DirectX® 9.0b -ohjelmaa tai uudempaa versiota, hyväksy DirectX® 9.0b:n käyttösopimus (License Agreement) valitsemalla Yes (Kyllä). DirectX® 9.0b -ohjelman asennusohjelma käynnistyy.

## PIKANÄPPÄIMET

Seuraavassa taulukossa on ilmoitettu kaikki Chris Sawyer's Locomotion -pelin toimintojen ja komentojen oletuspikanäppäimet. Voit mukauttaa komentoja (liittämällä ne haluamiisi näppäimiin) Game Options (Peliasetukset) -ikkunan Control Options (Komentoasetukset) -osassa. (Lisätietoja on englanninkielisen ohjekirjan kohdassa "Game Options Window".)

TOIMINTO	PIKANÄPPÄIN
Päällimmäisen ikkunan sulkeminen	askelpalautin
Kaikkien irrallisten ikkunoiden sulkeminen	vaihtonäppäin + askelpalautin
Rakennustilan peruuttaminen	ESC
Pelin keskeyttäminen/jatkaminen	Pause
Näkymän loitontaminen	PageUp
Näkymän lähentäminen	PageDown
Näkymän kääntäminen	Enter
Rakennusobjektin kääntäminen	Z
Maanalaisen näkymän käyttöönotto tai käytöstä poisto	1
Edustajälkien ja teiden piilottaminen tai näyttäminen	2
Edustanäkymän piilottaminen tai näyttäminen	3
Maan korkeusmerkkien näyttäminen tai piilottaminen	4
Raiteiden ja teiden korkeusmerkkien näyttäminen tai piilottaminen	5
Suuntanuolien näyttäminen tai piilottaminen raiteilla ja teillä	6
Maan säätö	L
Veden säätö	W
Puiden istutus	P
Alueen raivaaminen	X
Raiteiden rakentaminen	T
Teiden rakentaminen	R
Lentokenttien rakentaminen	A
Satamien rakentaminen	D
Uusien laitteiden rakentaminen	N
Ajoneuvoluettelon näyttäminen	V
Asemaluettelon näyttäminen	S
Kaupunkiluettelon näyttäminen	U
Teollisuusluettelon näyttäminen	I
Kartan näyttäminen	M
Yritysluettelon näyttäminen	C
Yrityksen tietojen näyttäminen	Q
Talouden näyttäminen	F
Ilmoitusluettelon näyttäminen	SARKAIN
Kuvakaappaus	Ctrl + S
Viimeisimmän ilmoituksen peruutus tai näyttäminen	VALILYONTI
Sanoman lähettäminen (kaksinpelitulassa)	F1



## KOMMA IGÅNG

### FILEN README

Till CD-ROM-spelet *Chris Sawyer's Locomotion* hör en ReadMe-fil som inbegriper licensavtalet och aktuell information om spelet. Vi rekommenderar att du tar dig tid att läsa filen för att informera dig om de ändringar som införts sedan handboken trycktes.

Du öppnar **ReadMe-filen** genom att dubbelklicka på ikonen ReadMe.txt i katalogen *Chris Sawyer's Locomotion* på hårddisken (vanligtvis C:\Program Files\Atari\Locomotion). Du kan också öppna filen genom att klicka på knappen Start i Aktivitetsfältet i Windows®, välja **Program > Atari > Locomotion** och klicka på View ReadMe (Visa Readme).

### BRUKSANVISNING

På spelskivan finns en elektronisk version av spelets bruksanvisning i .pdf-format, Adobe Acrobat Reader 6 (med vilket du öppnar bruksanvisningen).

### INSTALLATION

1. Starta Windows® 98/Me/2000/XP.
2. Sätt in skivan med spelet *Chris Sawyer's Locomotion* i CD-ROM-enheten.
3. Om du har aktiverat Spela upp automatiskt visas en titelskärm efter en kort stund. Om Spela upp automatiskt inte har aktiverats eller om installationen inte startar automatiskt, kan du klicka på Start i Aktivitetsfältet i Windows® och därefter välja Kör. Skriv D:\Setup och klicka på OK. Obs! Om CD-ROM-enheten har en annan beteckning än D skriver du denna beteckning i stället.
4. Slutför installationen av *Chris Sawyer's Locomotion* genom att följa övriga anvisningar på skärmen.
5. När installationen är klar klickar du på Start i Aktivitetsfältet i Windows® och väljer Program > Atari > Chris Sawyer's Locomotion > Locomotion för att starta spelet. Du kan också starta spelet genom att klicka på ikonen Chris Sawyer's Locomotion på skrivbordet i Windows®.

**Obs!** Skivan med spelet *Chris Sawyer's Locomotion* måste sitta i CD-ROM-enheten för att du ska kunna spela.

## Installera DirectX®

*Chris Sawyer's Locomotion* kräver DirectX® 9.0b eller högre för att fungera. Om DirectX® 9.0b eller högre inte har installerats på datorn kan du klicka på Ja för att godta licensavtalet till DirectX® 9.0b. Då startas installationsprogrammet till DirectX® 9.0b.

## GENVÄGAR PÅ TANGENTBORDET

Följande tabell är en lista över alla standardinställda kortkommandon till funktionerna och kommandona i *Chris Sawyer's Locomotion*. Du kan anpassa kommandona (koppla dem till de tangenter du själv önskar) med hjälp av alternativen i fönstret med spelalternativ. (Mer information finns i avsnittet om detta fönster i den kompletta handboken.)

ÅTGÄRD	SNABBTANGENT
Stäng det övre fönstret	Backsteg
Stäng alla flytande fönster	Skift + Backsteg
Avbryt byggnadsläget	ESC
Gör paus/återuppta spel	Pause
Zooma ut	PageUp
Zooma in	PageDown
Rotera vy	Return
Rotera byggnadsobjekt	Z
Underjordisk vy, växlingsknapp	1
Dölj stigar och vägar i förgrunden	2
Dölj landskap i förgrunden, växlingsknapp	3
Höjdmarkeringar på land, växlingsknapp	4
Höjdmarkeringar på stigar och vägar, växlingsknapp	5
Riktningspilar på stigar och vägar, växlingsknapp	6
Andra land	L
Andra vatten	W
Plantera träd	P
Schakta område	X
Skapa stigar	T
Skapa vägar	R
Bygg flygplatser	A
Bygg fartygsdockor	D
Bygg nya fordon	N
Visa fordonslista	V
Visa stationslista	S
Visa stadslista	U
Visa fabrikslista	I
Visa karta	M
Visa företagslista	C
Visa företagsinformation	Q
Visa kapital	F
Visa meddelandelista	TAB
Skärmbild	Ctrl + S
Avbryt eller visa senaste meddelande	Blanksteg
Skicka meddelande (tvåspelarläge)	F1



## PARA COMEÇAR

### O FICHEIRO README

O CD-ROM do jogo *Chris Sawyer's Locomotion* tem um ficheiro ReadMe que inclui o Acordo de Licenciamento e a informação actualizada sobre o jogo. Recomendamos vivamente que leias este ficheiro de forma a beneficiar das alterações que foram feitas depois de o manual ter sido impresso.

Para veres este ficheiro faz um duplo-clique sobre o ícone **ReadMe.txt** no directório *Chris Sawyer's Locomotion* que encontrarás no teu disco rígido (em geral C:\Program Files\Atari\Locomotion). Também podes ver o ficheiro ReadMe clicando primeiro no botão **Start** na barra de tarefas do Windows®, depois seleccionando **Programas>Atari>Locomotion**, e clicando em View ReadMe.

### MANUEL DE INSTRUÇÕES

Incluído no disco de jogo deste programa está uma versão electrónica do Manual de Instruções em formato .pdf, o Adobe Acrobat Reader 6 (que te permite ver o manual em formato .pdf).

### CONFIGURAÇÃO E INSTALAÇÃO

1. Inicia o Windows® 98/Me/2000/XP.
2. Introdz o CD-ROM do jogo *Chris Sawyer's Locomotion* na unidade de CD-ROM.
3. Se o AutoPlay estiver activo, deverá aparecer o ecrã do título. Se o AutoPlay não estiver activo, ou se a instalação não começar automaticamente, clica no botão Start na barra de tarefas do Windows®, depois em Executar, escreve D:\Setup e clica em OK. Nota: Se a tua unidade de CD-ROM tiver outra letra que não seja o D, substitui essa letra.
4. Segue as restantes instruções do ecrã para acabares de instalar o *Chris Sawyer's Locomotion*.
5. Logo que a instalação esteja completa, clica no botão Start na barra de tarefas do Windows® e escolhe **Programas/Atari/Chris Sawyer's Locomotion/Locomotion** para começares o jogo. Podes também clicar no ícone Chris Sawyer's Locomotion no teu ambiente de trabalho do Windows® para começares o jogo.

**Nota:** Para jogares, tens que ter o disco do jogo Chris Sawyer's Locomotion na unidade de CD-ROM.

## Instalação do DirectX®

O jogo do *Chris Sawyer's Locomotion* necessita da versão 9.0b do DirectX® ou superior para correr. Se não tens o DirectX® 9.0b ou superior instalado no teu computador, clica em "Yes" para aceites o Acordo de Licenciamento do DirectX® 9.0b. Isto fará prosseguir a Instalação do DirectX® 9.0b.

## ATALHOS DO TECLADO

A seguinte tabela faz a listagem dos atalhos do teclado definidos por defeito para as funções e comandos do jogo *Chris Sawyer's Locomotion*. Podes personalizar estes comandos (defini-los com as teclas que preferires) na secção das Opções de Comando na janela das Opções de Jogo (Vê a "Janela das Opções de Jogo" no manual completo para saberes mais pormenores).

ACÇÃO	ATALHO DO TECLADO
Fechar a Janela Superior	Backspace
Fechar Todas as Janelas Flutuantes	Shift + Backspace
Cancelar o Modo de Construção	ESC
Colocar / Retirar a Pausa no Jogo	Pause
Retirar a Visão Aumentada	PageUp
Colocar a Visão Aumentada	PageDown
Rodar a Visão	Return
Rodar o Objecto de Construção	Z
Alternar para Visão Subterrânea	1
Alternador para Esconder as Pistas & Estradas de Fundo	2
Alternador para Esconder os Cenários de Fundo	3
Alternador das Marcas de Altitude no Terreno	4
Alternador das Marcas de Altitude nas Pistas & Estradas	5
Alternador das Setas de Direcção em Pistas & Estradas	6
Ajustar o Terreno	L
Ajustar a Água	W
Plantar Árvores	P
Terraplenar a Área	X
Construir Pistas	T
Construir Estradas	R
Construir Aeroportos	A
Construir Docas	D
Construir Novos Veículos	N
Mostrar a Lista de Veículos	V
Mostrar a Lista de Estações	S
Mostrar a Lista de Cidades	U
Mostrar a Lista de Indústrias	I
Mostrar o Mapa	M
Mostrar a Lista de Companhias	C
Mostrar Informação da Companhia	Q
Mostrar as Finanças	F
Mostrar a Lista de Anúncios	TAB
Imagem de Ecrã	Ctrl + S
Cancelar ou Mostrar o Último Anúncio	Spacebar
Enviar Mensagem (Modo para 2 Jogadores)	F1



# CREDITS

Chris Sawyer  
*Designer and Programmer*

Simon Foster  
*Graphics*

Allister Brimble  
*Sound and Music*

John Broomhall  
*Title Music*

Jacqui Lyons at Marjacq, Ltd.  
*Representation*

## Thanks to

Katrina Morrin,  
Natasha Morrin,  
Jim Wills

## Atari

Tom Zahorik  
*Senior Producer*

Jeff Foley  
*Senior Brand Manager*

Bob Welch  
*Executive Producer*

Paul Hellier  
*Director of Technology*

Peter Matiss  
*Director of Marketing*

Steve Martin  
*Director of Creative Services*

Elizabeth Mackney  
*Director of Editorial & Documentation  
Services*

Charlie Rizzo  
*Art Director*

Rod Tilley  
*Graphic Designer*

Kurt Carlson  
*Documentation Specialist*

Paul Collin  
*Copywriter*

David Ellis  
*Copywriter*

Michael Gilmartin  
*Director of Publishing Support*

Bill Carroll  
*Q.A. Manager*

Ken Ford  
*I.T. Manager/Western Region*

Michael Vetsch  
*Manager of Technical Support*

Jason Cordero  
*Q.A. Testing Supervisor*

Marshall Clevesy  
*Lead Tester*

John Hockaday  
Tony Hsu

Sean McLaren  
Brandon Reed

Nessie Rilveria  
*Testers*

Dave Strang  
*Compatibility Lab Supervisor*

Cuong Vu  
*Compatibility Test Lead*

Randy Buchholz  
Mark Florentino  
Chris McQuinn  
Scotte Kramer  
Patricia-Jean Cody  
*Compatibility Analysts*

Ken Edwards  
*Engineering Services Specialist*

Eugene Lai  
Dan Burkhead  
*Engineering Services Technician*

Todd Curtis  
*Vice President, Operations*

Eddie Pritchard  
*Director of Manufacturing*

Lisa Leon  
*Lead Senior Buyer*

Gardnor Wong  
*Senior Buyer*

Tara Moretti  
*Buyer*

Janet Sieler  
*Materials Planner*  
Nichole Mackey  
*Process Planner*

### **Special Thanks**

John Billington, Cecelia Hernandez

### **ATARI EUROPE**

Jean Marcel Nicolai  
*Senior VP of International Operations.*

REPUBLICAN TEAM  
Rebecka Pernered  
*Republishing Director*

Sébastien Chaudat  
*Republishing Team Leader*

Gérard Barnaud  
*Republishing Producer*

Ludovic Bony  
*Localisation Team Leader*

Weronica Larsson  
*Localisation Project Manager*

Olivier Caudrelier  
*Localisation Technical Consultant*

Caroline Fauchille  
*Printed Materials Team Leader*

Sandrine Dubois  
*Printed Materials Project Manager*

Vincent Hattenberger  
*Copy Writer*

Jenny Clark  
*MAM Project manager*

### **MANUFACTURING / SUPPLY CHAIN**

Alain Fourcaud  
*Director Supply Chain*

Delphine Doncieux  
Fanny Giroud  
Mike Shaw  
Jean Grenouiller  
*Manufacturing Coordinators*

QUALITY ASSURANCE TEAM  
Lewis Glover  
*Quality Director*

Bruno Trubia  
*Quality Control Project Manager*

Lisa Charman  
*Certification Project Manager*

Pierre Marc Bissay  
*Product Planning Project Manager*

Philippe Louvet  
*Engineering Services Manager*

Stéphane Entéric  
*Engineering Services Expert*

Emeric Polin  
*Engineering Services Expert*

MARKETING TEAM  
Martin Spiess  
*European Marketing Senior VP*

Cyril Voiron  
*European Group Marketing Manager*

Lisa Humphries  
*European Brand Manager*

Lynn Daniel  
*European Communications Manager*

LOCAL MARKETING TEAM  
Laura Aznar  
*Spain – Product Manager*

Charlotte Brown  
*UK – Product Manager*

Manuel Fontanella  
*Italy – Product Manager*



Beryl Gonnard  
*France – Product Manager*

Simone Goudsmit  
*Benelux – Product Manager*

Jens Hofmann  
*Germany – Product Manager*

Nikke Lindner  
*Nordic – Product Manager*

Raelene Knowles  
*Australia – Product Manager*

Vaggelis Karvounis  
*Greece – Product Manager*

Simon Slee  
*Asia Pacific – Product Manager*

Simon Stratton  
*Switzerland – Product Manager*

Joana Teixeira  
*Portugal – Product Manager*

Noam Weisberg  
*Israel – Product Manager*

#### SPECIAL THANKS TO :

RelQ and Praveen Shirali

Babel + Simon Cartwright & Mona

Quintanilla

ACE

KBP + Benoît Mergault & Jan Büchner

Synthesis + Emanuele Scichilone &

Mauro Bossetti

**The PEGI age rating system:**  
**Le système de classification PEGI**  
**El sistema de clasificación por edad PEGI:**  
**Il sistema di classificazione PEGI**  
**Das PEGI Alterseinstufungssystem**

Age Rating categories:  
 Les catégories de tranche  
 d'âge:

Categorías de edad:

Categorie relative all'età:

Altersklassen:



**Note:** There are some local variations!

**Note:** Il peut y avoir quelques variations en fonction du pays!

**Nota:** ¡Variará en función del país!

**Nota:** Può variare a secondo del paese!

**Achtung:** Länderspezifische Unterschiede können vorkommen!

Content Descriptors:

Description du contenu:

Descripciones del contenido:

Descrizioni del contenuto:

Inhaltsbeschreibung:



**BAD LANGUAGE**  
 LA FAMILIARITÉ DE LANGAGE  
 LENGUAJE INAPROPIADO  
 CATTIVO LINGUAGGIO  
 VULGÄRE SPRACHE



**DISCRIMINATION**  
 LA DISCRIMINATION  
 DISCRIMINACIÓN  
 DISCRIMINAZIONE  
 DISKRIMINIERUNG



**DRUGS**  
 LES DROGUES  
 DROGAS  
 DROGHE  
 DROGEN



**FEAR**  
 LA PEUR  
 TERROR  
 PAURA  
 ANGST UND  
 SCHRECKEN



**SEXUAL CONTENT**  
 LE CONTENU SEXUEL  
 CONTENIDO SEXUAL  
 SESSO  
 SEXUELLER INHALT



**VIOLENCE**  
 LA VIOLENCE  
 VIOLENCIA  
 VIOLENZA  
 GEWALT

For further information about the Pan European Game Information (PEGI) rating system please visit:

Pour de plus amples informations concernant l'évaluation du système d'information de jeu Pan Européen (PEGI), vous pouvez consulter:

Para obtener más información sobre el sistema de calificación de juegos (PEGI), por favor visite:

Per ulteriori informazioni sul sistema europeo di valutazione delle informazioni del gioco (PEGI) vi preghiamo di visitare:

Für weitere Informationen über das europäische Spiel-Informationen Bewertungs-System (PEGI) besuchen Sie bitte:

**<http://www.pegi.info>**

## KEYBOARD SHORTCUTS

The following table lists all of the default keyboard shortcuts for *Chris Sawyer's Locomotion* game functions and commands. You can customize these commands (map them to the keys of your choice) in the Control Options section of the Game Options window. (See "Game Options Window" on page 15 for details.)

ACTION	KEYBOARD SHORTCUT
Close Top-most Window	Backspace
Close All Floating Windows	Shift + Backspace
Cancel Construction Mode	ESC
Pause/Unpause Game	Pause
Zoom View Out	PageUp
Zoom View In	PageDown
Rotate View	Return
Rotate Construction Object	Z
Underground View Toggle	1
Hide Foreground Tracks & Roads Toggle	2
Hide Foreground Scenery Toggle	3
Height Marks on Land Toggle	4
Height Marks on Tracks & Roads Toggle	5
Directional Arrows on Tracks & Roads Toggle	6
Adjust Land	L
Adjust Water	W
Plant Trees	P
Bulldoze Area	X
Build Tracks	T
Build Roads	R
Build Airports	A
Build Docks	D
Build New Vehicles	N
Show Vehicles List	V
Show Stations List	S
Show Towns List	U
Show Industries List	I
Show Map	M
Show Companies List	C
Show Company Information	Q
Show Finances	F
Show Announcements List	TAB
Screen Shot	Ctrl + S
Cancel or Show Last Announcement	Spacebar
Send Message (2-Player Mode)	F1